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non-Federal or regional LLW disposal sites, or any information submitted by the public in response to a FEDERAL REGISTER notice requesting comment, as provided in paragraph (b) of §62.11 of this part.

#### Subpart D—Termination of Emergency Access

## § 62.31 Termination of emergency access.

(a) The Commission may terminate a grant of emergency access when emergency access is no longer necessary to eliminate an immediate threat to public health and safety or the common defense and security.

(b) The Commission may terminate a grant of emergency access if an applicant has provided inaccurate information in its application for emergency access or if the applicant has failed to comply with this part or any conditions set by the Commission pursuant to this part.

## PART 70—DOMESTIC LICENSING OF SPECIAL NUCLEAR MATERIAL

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AUTHORITY: Secs. 51, 53, 161, 182, 183, 68 Stat. 929, 930, 948, 953, 954, as amended, sec. 234, 83 Stat. 444, as amended, sec. 1701, 106 Stat. 2951, 2952, 2953 (42 U.S.C. 2071, 2073, 2201, 2232, 2233, 2282, 2297f); secs. 201, as amended, 202, 204, 206, 88 Stat. 1242, as amended, 1244, 1245, 1246, (42 U.S.C. 5841, 5842, 5845, 5846).

Sections 70.1(c) and 70.20a(b) also issued under secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161). Section 70.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5851). Section 70.21(g) also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Section 70.31 also issued under sec. 57d, Pub. L. 93-377, 88 Stat. 475 (42 U.S.C. 2077). Sections 70.36 and 70.44 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 70.61 also issued under secs. 186, 187, 68 Stat. 955 (42 U.S.C. 2236, 2237). Section 70.62 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138).

Source: 21 FR 764, Feb. 3, 1956, unless otherwise noted.

#### GENERAL PROVISIONS

#### § 70.1 Purpose.

- (a) Except as provided in paragraphs (c) and (d) of this section, the regulations of this part establish procedures and criteria for the issuance of licenses to receive title to, own, acquire, deliver, receive, possess, use, and transfer special nuclear material; and establish and provide for the terms and conditions upon which the Commission will issue such licenses.
- (b) The regulations contained in this part are issued pursuant to the Atomic Energy Act of 1954, as amended (68 Stat. 919) and Title II of the Energy Reorganization Act of 1974 (88 Stat. 1242).
- (c) The regulations in part 72 of this chapter establish requirements, procedures, and criteria for the issuance of licenses to possess:
- (1) Spent fuel and other radioactive materials associated with spent fuel storage in an independent spent fuel storage installation (ISFSI), or
- (2) Spent fuel, high-level radioactive waste, and other radioactive materials

asociated with the storage in a monitored retrievable storage installation (MRS), and the terms and conditions under which the Commission will issue such licenses.

(d) As provided in part 76 of this chapter, the regulations of this part establish procedures and criteria for physical security and material control and accounting for the issuance of a certificate of compliance or the approval of a compliance plan.

[21 FR 764, Feb. 3, 1956, as amended at 32 FR 4056, Mar. 15, 1967; 40 FR 8791, Mar. 3, 1975; 43 FR 6924, Feb. 17, 1978; 45 FR 74712, Nov. 12, 1980; 53 FR 31682, Aug. 19, 1988; 59 FR 48960, Sept. 23, 1994]

#### § 70.2 Scope.

Except as provided in §§70.11 to 70.13, inclusive, the regulations in this part apply to all persons in the United States. This part also gives notice to all persons who knowingly provide to any licensee, contractor, or subcontractor, components, equipment, materials, or other goods or services, that relate to a licensee's activities subject to this part, that they may be individually subject to NRC enforcement action for violation of §70.10.

[56 FR 40691, Aug. 15, 1991]

#### § 70.3 License requirements.

No person subject to the regulations in this part shall receive title to, own, acquire, deliver, receive, possess, use, or transfer special nuclear material except as authorized in a license issued by the Commission pursuant to these regulations.

[32 FR 2562, Feb. 7, 1967, as amended at 43 FR 6924, Feb. 17, 1978]

#### § 70.4 Definitions.

Act means the Atomic Energy Act of 1954 (68 Stat 919), including any amendments thereto:

Agreement State as designated in part 150 of this chapter means any State with which the Commission has entered into an effective agreement under subsection 274b. of the Act. Nonagreement State means any other State.

Alert means events may occur, are in progress, or have occurred that could lead to a release of radioactive material[s] but that the release is not

expected to require a response by an offsite response organization to protect persons offsite.

Atomic energy means all forms of energy released in the course of nuclear fission or nuclear transformation;

Atomic weapon means any device utilizing atomic energy, exclusive of the means for transporting or propelling the device (where such means is a separable and divisible part of the device), the principal purpose of which is for use as, or for development of, a weapon, a weapon prototype, or a weapon test device:

Commencement of construction means any clearing of land, excavation, or other substantial action that would adversely affect the natural environment of a site but does not include changes desirable for the temporary use of the land for public recreational uses, necessary borings to determine site characteristics or other preconstruction monitoring to establish background information related to the suitability of a site or to the protection of environmental values.

*Commission* means the Nuclear Regulatory Commission or its duly authorized representatives;

Common defense and security means the common defense and security of the United States;

Contiguous sites means licensee controlled locations, deemed by the Commission to be in close enough proximity to each other, that the special nuclear material must be considered in the aggregate for the purpose of physical protection.

Decommission means to remove (as a facility) safely from service and reduce residual radioactivity to a level that permits release of the property for unrestricted use and termination of license.

Department and Department of Energy means the Department of Energy Organization Act (Pub. L. 95-91, 91 Stat. 565, 42 U.S.C. 7101 et seq.), to the extent that the Department, or its duly authorized representatives, exercises functions formerly vested in the U.S. Atomic Energy Commission, its Chairman, members, officers and components and transferred to the U.S. Energy Research and Development Administration and to the Administrator thereof

pursuant to sections 104(b), (c) and (d) of the Energy Reorganization Act of 1974 (Pub. L. 93–438, 88 Stat. 1233 at 1237, 42 U.S.C. 5814) and retransferred to the Secretary of Energy pursuant to section 301(a) of the Department of Energy Organization Act (Pub. L. 95–91, 91 Stat. 565 at 577–578, 42 U.S.C. 7151).

Effective dose equivalent means the sum of the products of the dose equivalent to the body organ or tissue and the weighting factors applicable to each of the body organs or tissues that are irradiated. Weighting factors are: 0.25 for gonads, 0.15 for breast, 0.12 for red bone marrow, 0.12 for lungs, 0.03 for thyroid, 0.03 for bone surface, and 0.06 for each of the other five organs receiving the highest dose equivalent.

Effective kilograms of special nuclear material means: (1) For plutonium and uranium-233 their weight in kilograms; (2) For uranium with an enrichment in the isotope U-235 of 0.01 (1%) and above, its element weight in kilograms multiplied by the square of its enrichment expressed as a decimal weight fraction; and (3) For uranium with an enrichment in the isotope U-235 below 0.01 (1%), by its element weight in kilograms multiplied by 0.0001.

Formula quantity means strategic special nuclear material in any combination in a quantity of 5000 grams or more computed by the formula, grams=(grams contained U-235)+2.5 (grams U-233+grams plutonium). This class of material is sometimes referred to as a Category I quantity of material.

Government agency means any executive department, commission, independent establishment, corporation, wholly or partly owned by the United States of America which is an instrumentality of the United States, or any board, bureau, division, service, office, officer, authority, administration, or other establishment in the executive branch of the Government;

*License*, except where otherwise specified, means a license issued pursuant to the regulations in this part;

Person means (1) any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, Government agency other than the Commission or the Department, except that the Department shall be considered a person within the

meaning of the regulations in this part to the extent that its facilities and activities are subject to the licensing and related regulatory authority of the Commission pursuant to section 202 of the Energy Reorganization Act of 1974 (88 Stat. 1244), 9 any State or any political subdivision of or any political entity within a State, any foreign government or nation or any political subdivision of any such government or nation, or other entity; and (2) any legal successor, representative, agent, or agency of the foregoing;

Plutonium processing and fuel fabrication plant means a plant in which the following operations or activities are conducted: (1) Operations for manufacture of reactor fuel containing plutonium including any of the following: (i) Preparation of fuel material; (ii) formation of fuel material into desired shapes; (iii) application of protective cladding; (iv) recovery of scrap material; and (v) storage associated with such operations; or (2) Research and development activities involving any of the operations described in paragraph (1) of this definition except for research and development activities utilizing unsubstantial amounts of plutonium.

Principal activities, as used in this part, means activities authorized by the license which are essential to achieving the purpose(s) for which the

license was issued or amended. Storage during which no licensed material is accessed for use or disposal and activities incidental to decontamination or decommissioning are not principal activities.

Produce, when used in relation to special nuclear material, means (1) to manufacture, make, produce, or refine special nuclear material; (2) to separate special nuclear material from other substances in which such material may be contained; or (3) to make or to produce new special nuclear material;

Research and development means (1) theoretical analysis, exploration, or experimentation; or (2) the extension of investigative findings and theories of a scientific or technical nature into practical application for experimental and demonstration purposes, including the experimental production and testing of models, devices, equipment, materials, and processes;

Restricted Data means all data concerning (1) design, manufacture or utilization of atomic weapons; (2) the production of special nuclear material; or (3) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to section 142 of the Act;

Sealed source means any special nuclear material that is encased in a capsule designed to prevent leakage or escape of the special nuclear material.

Site Area emergency means events may occur, are in progress, or have occurred that could lead to a significant release of radioactive material and that could require a response by offsite response organizations to protect persons offsite.

Source material means source material as defined in section 11z. of the Act and in the regulations contained in part 40 of this chapter;

Special nuclear material means (1) plutonium, uranium 233, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the Commission, pursuant to the provisions of section 51 of the act, determines to be special nuclear material, but does not include source material; or (2) any material artificially enriched by any of

<sup>&</sup>lt;sup>9</sup>The Department facilities identified in section 202 are:

<sup>(1)</sup> Demonstration Liquid Metal Fast Breeder reactors when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the suitability for commercial application of such a reactor.

<sup>(2)</sup> Other demonstration nuclear reactors, except those in existence on January 19, 1975, when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the suitability for commercial application of such a reactor.

<sup>(3)</sup> Facilities used primarily for the receipt and storage of high-level radioactive wastes resulting from licensed activities.

<sup>(4)</sup> Retrievable Surface Storage Facilities and other facilities authorized for the express purpose of subsequent long-term storage of high-level radioactive waste generated by the Department, which are not used for, or are part of, research and development activities

the foregoing but does not include source material;

Special nuclear material means (1) plutonium, uranium 233, uranium enriched in the isotope 235 or in the isotope 235, and any other material which the Commission, pursuant to the provisions of section 51 of the act, determines to be special nuclear material, but does not include source material; or (2) any material artificially enriched by any of the foregoing but does not include source material;

Special nuclear material of low strategic significance means:

- (1) Less than an amount of special nuclear material of moderate strategic significance as defined in paragraph (1) of the definition of strategic nuclear material of moderate strategic significance in this section, but more than 15 grams of uranium-235 (contained in uranium enriched to 20 percent or more in U-235 isotope) or 15 grams of uranium-233 or 15 grams of plutonium or the combination of 15 grams when computed by the equation, grams = (grams contained U-235) + (grams plutonium) + (grams U-233); or
- (2) Less than 10,000 grams but more than 1,000 grams of uranium-235 (contained in uranium enriched to 10 percent or more but less than 20 percent in the U-235 isotope); or
- (3) 10,000 grams or more of uranium-235 (contained in uranium enriched above natural but less than 10 percent in the U-235 isotope).

This class of material is sometimes referred to as a Category III quantity of material.

Special nuclear material of moderate strategic significance means:

- (1) Less than a formula quantity of strategic special nuclear material but more than 1,000 grams of uranium-235 (contained in uranium enriched to 20 percent or more in the U-235 isotope) or more than 500 grams of uranium-233 or plutonium, or in a combined quantity of more than 1,000 grams when computed by the equation, grams = (grams contained U-235) + 2 (grams U-233 + grams plutonium); or
- (2) 10,000 grams or more of uranium-235 (contained in uranium enriched to 10 percent or more but less than 20 percent in the U-235 isotope).

This class of material is sometimes referred to as a Category II quantity of material.

Special nuclear material scrap means the various forms of special nuclear material generated during chemical and mechanical processing, other than recycle material and normal process intermediates, which are unsuitable for use in their present form, but all or part of which will be used after further processing.

Strategic special nuclear material means uranium-235 (contained in uranium enriched to 20 percent or more in the U<sup>235</sup> isotope), uranium-233, or plutonium.

Transient shipment means a shipment of nuclear material, originating and terminating in foreign countries, on a vessel or aircraft which stops at a United States port.

*United States*, when used in a geographical sense, includes Puerto Rico and all territories and possessions of the United States.

Uranium enrichment facility means:

- (1) Any facility used for separating the isotopes of uranium or enriching uranium in the isotope 235, except laboratory scale facilities designed or used for experimental or analytical purposes only; or
- (2) Any equipment or device, or important component part especially designed for such equipment or device, capable of separating the isotopes of uranium or enriching uranium in the isotope 235.

[21 FR 764, Feb. 3, 1956]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting  $\S70.4$ , see the List of CFR Sections Affected in the Finding Aids section of this volume.

#### § 70.5 Communications.

- (a) Unless otherwise specified or covered under the regional licensing program as provided in paragraph (b) of this section, any communication or report concerning the regulations in this part and any application filed under these regulations may be submitted to the Commission as follows:
- (1) By mail addressed to: Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

- (2) By delivery in person to the Commission's offices to the Director, Office of Nuclear Material Safety and Safeguards at:
- (i) 2120 L Street NW., Washington, DC; or
- (ii) 11545 Rockville Pike, Two White Flint North, Rockville, Maryland.
- (b) The Commission has delegated to the five Regional Administrators licensing authority for selected parts of its decentralized licensing program for nuclear materials as described in paragraph (b)(1) of this section. Any communication, report, or application covered under this licensing program must be submitted as specified in paragraph (b)(2) of this section.
- (1) The delegated licensing program includes authority to issue, renew, amend, cancel, modify, suspend, or revoke licenses for nuclear materials issued pursuant to 10 CFR parts 30 through 36, 39, 40, and 70 to all persons for academic, medical, and industrial uses, with the following exceptions:
- (i) Activities in the fuel cycle and special nuclear material in quantities sufficient to constitute a critical mass in any room or area. This exception does not apply to license modifications relating to termination of special nuclear material licenses that authorize possession of larger quantities when the case is referred for action from NRC's Headquarters to the Regional Administrators.
- (ii) Health and safety design review of sealed sources and devices and approval, for licensing purposes, of sealed sources and devices.
- (iii) Processing of source material for extracting of metallic compounds (including Zirconium, Hafnium, Tantalum, Titanium, Niobium, etc.).
- (iv) Distribution of products containing radioactive material to persons exempt pursuant to 10 CFR 32.11 through 32.26.
- (v) New uses or techniques for use of byproduct, source, or special nuclear material.
  - (vi) Reviews pursuant to §70.32(c).
  - (vii) Uranium enrichment facilities.
- (2) Submissions—(i) Region I. The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region I non-Agreement States and the

- District of Columbia: Connecticut, Delaware, Maine, Massachusetts, New Jersey, Pennsylvania, and Vermont. All inquiries, communications, and applications for a new license or an amendment or renewal of an existing license specified in paragraph (b)(1) of this section must be sent to: U.S. Nuclear Regulatory Commission, Region I, Nuclear Material Section B, 475 Allendale Road, King of Prussia, PA 19406.
- (ii) Region II. The regional licensing program involves all Federal facilties in the region and non-Federal licensees in the following Region II non-Agreement States and territories: Virginia, West Virginia, Puerto Rico, and the Virgin Islands. All inquiries, communications, and applications for a new license or an amendment or renewal of an existing license specified in paragraph (b)(1) of this section must be sent to: U.S. Nuclear Regulatory Commission, Region II, Material Radiation Protection Section, 101 Marietta Street, NW, Suite 2900, Atlanta, GA 30323.
- (iii) Region III. The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region III non-Agreement States: Indiana, Michigan, Minnesota, Missouri, Ohio, and Wisconsin. All inquiries, communications, and applications for a new license or an amendment or renewal of an existing license specified in paragraph (b)(1) of this section must be sent to: U.S. Nuclear Regulatory Commission, Region III, Material Licensing Section, 801 Warrenville Road, Lisle, Illinois 60532-4351.
- (iv) Region IV. The regional licensing program involves all Federal facilities in the region and non-Federal licensees in the following Region IV non-Agreement States and a territory: Alaska, Hawaii, Montana, Oklahoma, South Dakota, Wyoming, and Guam. All inquiries, communications, and applications for a new license or an amendment or renewal of an existing license specified in paragraph (b)(1) of this section must be sent to: U.S. Nuclear Regulatory Commission, Region IV, Material Radiation Protection Section, 611

Ryan Plaza Drive, suite 400, Arlington, Texas 76011

[48 FR 16032, Apr. 14, 1983, as amended at 49 FR 19631, May 9, 1984; 49 FR 47824, Dec. 7, 1984; 50 FR 14694, Apr. 15, 1985; 51 FR 36001, Oct. 8, 1986; 52 FR 38392, Oct. 16, 1987; 52 FR 48093, Dec. 18, 1987; 53 FR 3862, Feb. 10, 1988; 53 FR 4111, Feb. 12, 1988; 53 FR 43421, Oct. 27, 1988; 54 FR 6877, Feb. 15, 1989; 57 FR 18392, Apr. 30, 1992; 58 FR 7737, Feb. 9, 1993; 58 FR 64112, Dec. 6, 1993; 59 FR 17466, Apr. 13, 1994; 60 FR 24552, May 9, 1995]

#### § 70.6 Interpretations.

Except as specifically authorized by the Commission in writing, no interpretation of the meaning of the regulations in this part by any officer or employee of the Commission other than a written interpretation by the General Counsel will be recognized to be binding upon the Commission.

#### § 70.7 Employee protection.

- (a) Discrimination by a Commission licensee, an applicant for a Commission license, or a contractor or subcontractor of a Commission licensee or applicant against an employee for engaging in certain protected activities is prohibited. Discrimination includes discharge and other actions that relate to compensation, terms, conditions, or privileges of employment. The protected activities are established in section 211 of the Energy Reorganization Act of 1974, as amended, and in general are related to the administration or enforcement of a requirement imposed under the Atomic Energy Act or the Energy Reorganization Act.
- (1) The protected activities include but are not limited to:
- (i) Providing the Commission or his or her employer information about alleged violations of either of the statutes named in paragraph (a) introductory text of this section or possible violations of requirements imposed under either of those statutes;
- (ii) Refusing to engage in any practice made unlawful under either of the statutes named in paragraph (a) introductory text or under these requirements if the employee has identified the alleged illegality to the employer;
- (iii) Requesting the Commission to institute action against his or her employer for the administration or enforcement of these requirements;

- (iv) Testifying in any Commission proceeding, or before Congress, or at any Federal or State proceeding regarding any provision (or proposed provision) of either of the statutes named in paragraph (a) introductory text.
- (v) Assisting or participating in, or is about to assist or participate in, these activities
- (2) These activities are protected even if no formal proceeding is actually initiated as a result of the employee assistance or participation.
- (3) This section has no application to any employee alleging discrimination prohibited by this section who, acting without direction from his or her employer (or the employer's agent), deliberately causes a violation of any requirement of the Energy Reorganization Act of 1974, as amended, or the Atomic Energy Act of 1954, as amended.
- (b) Any employee who believes that he or she has been discharged or otherwise discriminated against by any person for engaging in protected activities specified in paragraph (a)(1) of this section may seek a remedy for the discharge or discrimination through an administrative proceeding in the Department of Labor. The administrative proceeding must be initiated within 180 days after an alleged violation occurs. The employee may do this by filing a complaint alleging the violation with the Department of Labor, Employment Standards Administration, Wage and Hour Division. The Department of Labor may order reinstatement, back pay, and compensatory damages.
- (c) A violation of paragraphs (a), (e), or (f) of this section by a Commission licensee, an applicant for a Commission license, or a contractor or subcontractor of a Commission licensee or applicant may be grounds for—
- (1) Denial, revocation, or suspension of the license.
- (2) Imposition of a civil penalty on the licensee or applicant.
  - (3) Other enforcement action.
- (d) Actions taken by an employer, or others, which adversely affect an employee may be predicated upon nondiscriminatory grounds. The prohibition applies when the adverse action

occurs because the employee has engaged in protected activities. An employee's engagement in protected activities does not automatically render him or her immune from discharge or discipline for legitimate reasons or from adverse action dictated by non-prohibited considerations.

(e)(1) Each specific licensee, each applicant for a specific license, and each general licensee subject to part 19 shall prominently post the revision of NRC Form 3, "Notice to Employees," ref-

erenced in 10 CFR 19.11(c).

(2) The posting of NRC Form 3 must be at locations sufficient to permit employees protected by this section to observe a copy on the way to or from their place of work. Premises must be posted not later than 30 days after an application is docketed and remain posted while the application is pending before the Commission, during the term of the license, and for 30 days following license termination.

(3) Copies of NRC Form 3 may be obtained by writing to the Regional Administrator of the appropriate U.S. Nuclear Regulatory Commission Regional Office listed in Appendix D to Part 20 of this chapter or by calling the NRC Information and Records Management

Branch at 301-415-7230.

(f) No agreement affecting the compensation, terms, conditions, or privileges of employment, including an agreement to settle a complaint filed by an employee with the Department of Labor pursuant to section 211 of the Energy Reorganization Act of 1974, as amended, may contain any provision which would prohibit, restrict, or otherwise discourage an employee from participating in protected activity as defined in paragraph (a)(1) of this section including, but not limited to, providing information to the NRC or to his or her employer on potential violations or other matters within NRC's regulatory responsibilities.

[58 FR 52413, Oct. 8, 1993, as amended at 60 FR 24552, May 9, 1995; 61 FR 6765, Feb. 22, 1996]

## § 70.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management

and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*). OMB has approved information collection requirements contained in this part under control number 3150–0009.

- (b) The approved information collection requirements contained in this part appear in §§ 70.19, 70.20a, 70.20b, 70.21, 70.22, 70.24, 70.25, 70.32, 70.33, 70.34, 70.38, 70.39, 70.42, 70.50, 70.51, 70.52, 70.53, 70.57, 70.58, 70.59, and 70.60.
- (c) This part contains information collection requirements in addition to those approved under the control number specified in paragraph (a) of this section. These information collection requirements and the control numbers under which they are approved are as follows:
- (1) In  $\S70.21$ , Form N-71 is approved under control number 3150-0056.
- (2) In §70.38, Form NRC-314 is approved under control number 3150-0028.
- (3) In §70.53, Form NRC-742 is approved under control number 3150-0004.
- (4) In §70.53, Form NRC-742c is approved under control number 3150-0058.
- (5) In §70.54, Form NRC-741 is approved under control number 3150-0003.
- (6) In §70.53, NRC Form 327 is approved under control number 3150-0139.

[49 FR 19628, May 9, 1984, as amended at 52 FR 19305, May 22, 1987; 56 FR 40769, Aug. 16, 1991; 57 FR 18392, Apr. 30, 1992; 58 FR 39634, July 26, 1993]

## § 70.9 Completeness and accuracy of information.

(a) Information provided to the Commission by an applicant for a license or by a licensee or information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

(b) Each applicant or licensee shall notify the Commission of information identified by the applicant or licensee as having for the regulated activity a significant implication for public health and safety or common defense and security. An applicant or licensee violates this paragraph only if the applicant or licensee fails to notify the Commission of information that the applicant or licensee has identified as having a significant implication for

public health and safety or common defense and security. Notification shall be provided to the Administrator of the appropriate Regional Office within two working days of identifying the information. This requirement is not applicable to information which is already required to be provided to the Commission by other reporting or updating requirements.

[52 FR 49373, Dec. 31, 1987]

#### § 70.10 Deliberate misconduct.

- (a) Any licensee or any employee of a licensee; and any contractor (including a supplier or consultant), subcontractor, or any employee of a contractor or subcontractor, of any licensee, who knowingly provides to any licensee, contractor, or subcontractor, components, equipment, materials, or other goods or services, that relate to a licensee's activities subject to this part; may not:
- (1) Engage in deliberate misconduct that causes or, but for detection, would have caused, a licensee to be in violation of any rule, regulation, or order, or any term, condition, or limitation of any license, issued by the Commission, or
- (2) Deliberately submit to the NRC, a licensee, or a licensee's contractor or subcontractor, information that the person submitting the information knows to be incomplete or inaccurate in some respect material to the NRC.
- (b) A person who violates paragraph (a)(1) or (a)(2) of this section may be subject to enforcement action in accordance with the procedures in  $10\ CFR$  part 2, subpart B.
- (c) For purposes of paragraph (a)(1) of this section, deliberate misconduct by a person means an intentional act or omission that the person knows:
- (1) Would cause a licensee to be in violation of any rule, regulation, or order, or any term, condition, or limitation, of any license issued by the Commission, or
- (2) Constitutes a violation of a requirement, procedure, instruction, contract, purchase order or policy of a licensee, contractor, or subcontractor.

[56 FR 40691, Aug. 15, 1991]

#### EXEMPTIONS

#### § 70.11 Persons using special nuclear material under certain Department of Energy and Nuclear Regulatory Commission contracts.

Except to the extent that Department facilities or activities of the types subject to licensing pursuant to section 202 of the Energy Reorganization Act of 1974 are involved, 10 any prime contractor of the Department is exempt from the requirements for a license set forth in section 53 of the Act and from the regulations in this part to the extent that such contractor, under his prime contract with the Department receives title to, owns, acquires, delivers, receives, possesses, uses, or transfers special nuclear material for:

(a) The performance of work for the Department at a United States Government-owned or controlled site, including the transportation of special nuclear material to or from such site and the performance of contract services during temporary interruptions of such transportation; (b) research in, or development, manufacture, storage, testing or transportation of, atomic weapons or components thereof; or (c) the use or operation of nuclear reactors or other nuclear devices in a United States Government-owned vehicle or

 $<sup>^{10} \</sup>rm The \ Department \ facilities \ identified \ in section 202 are:$ 

<sup>(1)</sup> Demonstration Liquid Metal Fast Breeder reactors when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the suitability for commercial application of such a reactor.

<sup>(2)</sup> Other demonstration nuclear reactors, except those in existence on January 19, 1975, when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the suitability for commercial application of such a reactor.

<sup>(3)</sup> Facilities used primarily for the receipt and storage of high-level radioactive wastes resulting from licensed activities.

<sup>(4)</sup> Retrievable Surface Storage Facilities and other facilities authorized for the express purpose of subsequent long-term storage of high-level radioactive waste generated by the Department, which are not used for, or are part of, research and development activities.

vessel. In addition to the foregoing exemptions, and subject to the requirement for licensing of Department facilities and activities pursuant to section 202 of the Energy Reorganization Act of 1974, any prime contractor or subcontractor of the Department or the Commission is exempt from the requirements for a license set forth in section 53 of the Act and from the regulations in this part to the extent that such prime contractor or subcontractor receives title to, owns, acquires, delivers, receives, possesses, uses, or transfers special nuclear material under his prime contract or subcontract when the Commission determines that the exemption of the prime contractor or subcontractor is authorized by law; and that, under the terms of the contract or subcontract there is adequate assurance that the work thereunder can be accomplished without undue risk to the public health and safety.

[40 FR 14085, Mar. 28, 1975; 40 FR 16047, Apr. 9, 1975; as amended at 43 FR 6924, Feb. 17, 1978]

#### § 70.12 Carriers.

Common and contract carriers, freight forwarders, warehousemen, and the U.S. Postal Service are exempt from the regulations in this part to the extent that they transport special nuclear material in the regular course of carriage for another or storage incident thereto. This exemption does not apply to the storage in transit or transport of material by persons covered by the general license issued under §70.20a and §70.20b.

[46 FR 12696, Feb. 18, 1981]

#### § 70.13 Department of Defense.

The regulations in this part do not apply to the Department of Defense to the extent that the Department receives, possesses and uses special nuclear material in accordance with the direction of the President pursuant to section 91 of the Act.

#### § 70.13a Foreign military aircraft.

The regulations in this part do not apply to persons who carry special nuclear material (other than plutonium) in aircraft of the armed forces of for-

eign nations subject to 49 U.S.C. 1508(a).

[46 FR 12194, Feb. 13, 1981]

#### § 70.14 Specific exemptions.

- (a) The Commission may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.
  - (b) [Reserved]
- (c) The DOE is exempt from the requirements of the regulations in this part to the extent that its activities are subject to the requirements of part 60 of the chapter.
- (d) Except as specifically provided in part 61 of this chapter, any licensee is exempt from the requirements of the regulations in this part to the extent that its activities are subject to the requirements of part 61 of this chapter.

[37 FR 5749, Mar. 21, 1972, as amended at 45 FR 65536, Oct. 3, 1980; 46 FR 13987, Feb. 25, 1981; 47 FR 57481, Dec. 27, 1982]

GENERAL LICENSES

#### § 70.18 Types of licenses.

Licenses for special nuclear material are of two types: general and specific. Any general license provided in this part is effective without the filing of applications with the Commission or the issuance of licensing documents to particular persons. Specific licenses are issued to named persons upon applications filed pursuant to the regulations in this part.

[29 FR 5884, May 5, 1964]

## § 70.19 General license for calibration or reference sources.

- (a) A general license is hereby issued to those persons listed below to receive title to, own, acquire, deliver, receive, possess, use and transfer in accordance with the provisions of paragraphs (b) and (c) of this section, plutonium in the form of calibration or reference sources:
- (1) Any person in a non-agreement State who holds a specific license issued by the Commission or the Atomic

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Energy Commission which authorizes him to receive, possess, use and transfer byproduct material, source material, or special nuclear material;

- (2) Any Government agency as defined in §70.4 that holds a specific license issued by the Commission that authorizes it to receive, possess, use, or transfer byproduct material, source material, or special nuclear material; and
- (3) Any person in an agreement State who holds a specific license issued by the Commission or the Atomic Energy Commission which authorizes him to receive, possess, use and transfer special nuclear material.
- (b) The general license in paragraph (a) of this section applies only to calibration or reference sources which have been manufactured or initially transferred in accordance with the specifications contained in a specific license issued pursuant to §70.39 or in accordance with the specifications contained in a specific license issued by an agreement State which authorizes manufacture of the sources for distribution to persons generally licensed by the agreement State.
- (c) The general license in paragraph (a) of this section is subject to the provisions of §§ 70.32, 70.50, 70.51, 70.52, 70.55, 70.56, 70.61, 70.62, and 70.71, and to the provisions of parts 19, 20 and 21 of this chapter. In addition, persons who receive title to, own, acquire, deliver, receive, possess, use or transfer one or more calibration or reference sources pursuant to this general license:
- (1) Shall not possess at any one time, at any one location of storage or use, more than 5 microcuries of plutonium in such sources;
- (2) Shall not receive, possess, use or transfer such source unless the source, or the storage container, bears a label which includes the following statement or a substantially similar statement which contains the information called for in the following statement: <sup>1</sup>

The receipt, possession, use and transfer of this source, Model ———, Serial No. ———, are subject to a general license and the regula-

tions of the United States Nuclear Regulatory Commission or of a State with which the Commission has entered into an agreement for the exercise of regulatory authority. Do not remove this label.

CAUTION—RADIOACTIVE MATERIAL—THIS SOURCE CONTAINS PLUTONIUM. DO NOT TOUCH RADIOACTIVE PORTION OF THIS SOURCE.

(Name of Manufacturer or Initial Transferor)

- (3) Shall not transfer, abandon, or dispose of such source except by transfer to a person authorized by a license from the Commission or the Atomic Energy Commission or an Agreement State to receive the source.
- (4) Shall store such source, except when the source is being used, in a closed container adequately designed and constructed to contain plutonium which might otherwise escape during storage.
- (5) Shall not use such source for any purpose other than the calibration of radiation detectors or the standardization of other sources.
- (d) The general license in paragraph (a) of this section does not authorize the manufacture, import, or export of calibration or reference sources containing plutonium.

[29 FR 5884, May 5, 1964, as amended at 32 FR 8124, June 7, 1967; 38 FR 22221, Aug. 17, 1973; 40 FR 8792, Mar. 3, 1975; 42 FR 28896, June 6, 1977; 43 FR 6924, Feb. 17, 1978; 48 FR 32329, July 15, 1983; 56 FR 40769, Aug. 16, 1991; 57 FR 33428, July 29, 1992]

## § 70.20 General license to own special nuclear material.

A general license is hereby issued to receive title to and own special nuclear material without regard to quantity. Notwithstanding any other provision of this chapter, a general licensee under this section is not authorized to acquire, deliver, receive, possess, use, transfer, import, or export special nuclear material, except as authorized in a specific license.

[33 FR 9810, July 9, 1968]

## § 70.20a General license to possess special nuclear material for transport.

(a) A general license is hereby issued to any person to possess formula quantities of strategic special nuclear material of the types and quantities subject to the requirements of §§ 73.20, 73.25,

<sup>&</sup>lt;sup>1</sup>Sources generally licensed under this section prior to January 19, 1975 may bear labels authorized by the regulations in effect on January 1, 1975.

73.26, and 73.27 of this chapter and irradiated reactor fuel containing material of the types and quantities subject to the requirements of §73.37 of this chapter, in the regular course of carriage for another or storage incident thereto. Carriers generally licensed under §70.20b are exempt from the requirements of this section. Carriers of irradiated reactor fuel for the United States Department of Energy are also exempt from the requirements of this section. The general license is subject to the applicable provisions of §§ 70.7 (a) through (e); 70.32 (a) and (b), and §§ 70.42, 70.52, 70.55, 70.61, 70.62, and 70.71.

- (b) Notwithstanding any other provision of this chapter, the general license issued under this section does not authorize any person to conduct any activity that would be authorized by a license issued pursuant to parts 30 through 36, 39, 40, 50, 72, 110, or other sections of this part.
- (c) Notwithstanding any other provision of this chapter, the duties of a general licensee under this section while in possession of formula quantities of strategic special nuclear material or irradiated reactor fuel in the regular course of carriage for another or storage incident thereto shall be limited to providing for the physical protection of such material against theft or sabotage. Unless otherwise provided by this section, a general license under this section is not subject to the requirements of Parts 19, 20, 70 and 73.
- (d) Any person who possesses formula quantities of strategic special nuclear material under this general license:
- (1) Shall have submitted and received approval of a transportation security plan. The security plan shall outline the procedures that will be used to meet the requirements of §873.20, 73.25, 73.26, 73.27 and 73.70(g) of this chapter including a plan for the selection, qualification, and training of armed escorts, or the specification and design of a specially designed truck or trailer as appropriate.
- (2) Shall assure that the transportation is in accordance with the applicable physical protection requirements of §§ 73.20, 73.25, 73.26, 73.27 and 73.70(g) of this chapter and the applicable approved transportation security plan.

- (3) Shall be subject to part 26 and §73.80 of this chapter.
- (e) Any person who possesses irradiated reactor fuel under this general license shall:
- (1) Assure or receive certification from the shipper that the transportation is in accordance with the applicable physical protection requirements of §73.37 of this chapter; and
- (2) Comply with the reporting requirements of § 73.71 of this chapter.

[44 FR 26851, May 8, 1979, as amended at 44 FR 68186, Nov. 28, 1979; 46 FR 12696, Feb. 18, 1981; 47 FR 30458, July 14, 1982; 53 FR 31682, Aug. 19, 1988; 58 FR 7737, Feb. 9, 1993; 58 FR 31471, June 3, 1993]

# § 70.20b General license for carriers of transient shipments of formula quantities of strategic special nuclear material of moderate strategic significance, special nuclear material of low strategic significance, and irradiated reactor fuel.

- (a) A general license is hereby issued to any person to possess transient shipments of the following kinds and quantities of special nuclear material:
- (1) A formula quantity of special nuclear material of the types and quantities subject to the requirements of §§ 73.20, 73.25, 73.26, and 73.27 of this chapter.
- (2) Special nuclear material of moderate and low strategic significance of the types and quantities subject to the requirements of §73.67 of this chapter.
- (3) Irradiated reactor fuel of the type and quantity subject to the requirements of §73.37 of this chapter.
- (b) Persons generally licensed under this section are exempt from the requirements of Parts 19 and 20 of this chapter and the requirements of this part, except §§ 70.32 (a) and (b), 70.52, 70.55, 70.61, 70.62, and 70.71.
- (c) Persons generally licensed under this section to possess a transient shipment of special nuclear material of the kind and quantity specified in paragraph (a)(1) of this section shall provide physical protection for that shipment in accordance with or equivalent to §§73.20(a), 73.20(b), 73.25, and 73.71(b) of this chapter from the time a shipment enters a United States port until it exits that or another United States port.

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- (d) Persons generally licensed under this section to possess a transient shipment of special nuclear material of moderate or low strategic significance of the kind and quantity specified in paragraph (a)(2) of this section shall provide physical protection for that shipment in accordance with or equivalent to \$73.67 of this chapter and shall comply with the requirements of \$73.71(b) of this chapter.
- (e) Persons generally licensed under this section to possess a transient shipment of irradiated reactor fuel of the kind and quantity specified in paragraph (a)(3) of this section shall provide physical protection for that shipment in accordance with or equivalent to §73.37 of this chapter and shall comply with the requirements of §73.71(b) of this chapter.
- (f)(1) Persons generally licensed under this section, who plan to carry transient shipments with scheduled stops at United States ports, shall notify in writing the Division of Industrial and Medical Nuclear Safety, U.S. Nuclear Regulatory Commission, Washington, DC 20555.
- (2) A person generally licensed under this section shall assure that:
- (i) The notification will be received at least 10 days before transport of the shipment commences at the shipping facility;
- (ii) The Division of Industrial and Medical Nuclear Safety has been notified by telephone at (301) 415-7197, at least 10 days before transport of the shipment commences at the shipping facility, that an advance shipping notice has been sent by mail; and
- (iii) The Division of Industrial and Medical Nuclear Safety will be notified by telephone at (301) 415–7197 of any changes to the shipment itinerary.
- (3) Persons who are generally licensed under paragraph (a)(1) of this section must include the information listed in paragraphs (f)(3)(i) through (ix) of this section. Persons who are generally licensed under §70.20b(a)(2) and §70.20b(a)(3) must include the information listed in paragraphs (f)(3) (i) through (viii) of this section.
- (i) Location of all scheduled stops in United States territory;

- (ii) Arrival and departure times for all scheduled stops in United States territory;
  - (iii) The type of transport vehicle;
- (iv) A physical description of the shipment (elements, isotopes, and enrichments);
- (v) The number and types of containers:
- (vi) The name and telephone number of the carrier's representative at each stopover location in United States territory;
- (vii) The estimated time and date that shipment will commence and that each country (other than the United States) along the route is scheduled to be entered;
- (viii) For shipments between countries that are not party to the Convention on the Physical Protection of Nuclear Material, provide assurances, as far as is practicable, that this nuclear material will be protected during international transport at levels described in Annex I to that Convention (see appendices E and F of part 73 of this chapter); and
- (ix) A physical protection plan for implementing the requirement of §70.20b(c), which will include the use of armed personnel to protect the shipment during the time the shipment is in a United States port.
- (g) Persons generally licensed under this section making unscheduled stops at United States ports, immediately after the decision to make an unscheduled stop, shall:
- (1) Provide to the Division of Industrial and Medical Nuclear Safety, the information required under paragraph (f) of this section.
- (2) In the case of persons generally licensed under paragraph (a)(1) of this section, arrange for local law enforcement authorities or trained and qualified private guards to protect the shipment during the stop.
- (3) In the case of persons generally licensed under paragraph (a)(2) of this section, arrange for the shipment to be protected as required in §73.67(e) of this chapter.
- (4) In the case of persons generally licensed under paragraph (a)(3) of this section, arrange for the shipment to be protected as required in §73.37(e) of this chapter.

(5) Implement these arrangements within a reasonable time after the arrival of the shipment at a United States port to remain in effect until the shipment exits that or another United States port.

[52 FR 9652, Mar. 26, 1987, as amended at 60 FR 24552, May 9, 1995]

#### LICENSE APPLICATIONS

#### §70.21 Filing.

- (a)(1) A person may apply for a license to possess and use special nuclear material in a plutonium processing or fuel fabrication plant, or for a uranium enrichment facility license by filing 25 copies of the application with the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555.
- (2) A person may apply for any other license issued under this part, by filing six copies of the application in accordance with the instructions in §70.5.
- (3) Information contained in previous applications, statements, or reports filed with the Commission may be incorporated by reference if the references are clear and specific.
- (b) An application for license filed pursuant to the regulations in this part will be considered also as an application for licenses authorizing other activities for which licenses are required by the Act, provided the application specifies the additional activities for which licenses are requested and complies with regulations of the Commission as to applications for such licenses.
- (c) Any application which contains Restricted Data shall be prepared in such manner that all Restricted Data are separated from the unclassified information.
- (d) Applications and documents submitted to the Commission in connection with applications may be made available for public inspection in accordance with the provisions of the regulations contained in part 2 of this chapter.
- (e) Each application for a special nuclear material license, other than a license exempted from part 170 of this chapter, shall be accompanied by the fee prescribed in §170.31 of this chapter.

No fee will be required to accompany an application for renewal or amendment of a license, except as provided in §170.31 of this chapter.

- (f) An application for a license to possess and use special nuclear material for processing and fuel fabrication, scrap recovery or conversion of uranium hexafluoride, or for the conduct of any other activity which the Commission has determined pursuant to subpart A of part 51 of this chapter will significantly affect the quality of the environment shall be filed at least 9 months prior to commencement of construction of the plant or facility in which the activity will be conducted, and shall be accompanied by an Environmental Report required under subpart A of part 51 of this chapter.
- (g) In response to a written request by the Commission, an applicant for a license to possess and use more than one effective kilogram of special nuclear material shall file with the Commission the installation information described in §75.11 of this chapter on Form N-71. The applicant shall also permit verification of such installation information by the International Atomic Energy Agency and take such other action as may be necessary to implement the US/IAEA Safeguards Agreement, in the manner set forth in §75.6 and §§75.11 through 75.14 of this chapter.
- (h) A license application for a uranium enrichment facility must be accompanied by an Environmental Report required under subpart A of part 51 of this chapter.

[21 FR 764, Feb. 3, 1956, as amended at 23 FR 1122, Feb. 21, 1958; 31 FR 4670, Mar. 19, 1966; 34 FR 19546, Dec. 11, 1969; 36 FR 146, Jan. 6, 1971; 37 FR 5749, Mar. 21, 1972; 49 FR 9406, Mar. 12, 1984; 49 FR 19628 and 19632, May 9, 1984; 49 FR 21699, May 23, 1984; 57 FR 18392, Apr. 30, 1992]

#### § 70.22 Contents of applications.

- (a) Each application for a license shall contain the following information:
- (1) The full name, address, age (if an individual), and citizenship of the applicant and the names and addresses of three personal references. If the applicant is a corporation or other entity, it shall indicate the State where it was incorporated or organized, the location

of the principal office, the names, addresses, and citizenship of its principal officers, and shall include information known to the applicant concerning the control or ownership, if any, exercised over the applicant by any alien, foreign corporation, or foreign government;

(2) The activity for which the special nuclear material is requested, or in which special nuclear material will be produced, the place at which the activity is to be performed and the general plan for carrying out the activity;

(3) The period of time for which the license is requested;

- (4) The name, amount, and specifications (including the chemical and physical form and, where applicable, isotopic content) of the special nuclear material the applicant proposes to use or produce;
  - (5) [Reserved]
- (6) The technical qualifications, including training and experience of the applicant and members of his staff to engage in the proposed activities in accordance with the regulations in this chapter;
- (7) A description of equipment and facilities which will be used by the applicant to protect health and minimize danger to life or property (such as handling devices, working areas, shields, measuring and monitoring instruments, devices for the disposal of radioactive effluents and wastes, storage facilities, criticality accident alarm systems, etc.);
- (8) Proposed procedures to protect health and minimize danger to life or property (such as procedures to avoid accidental criticality, procedures for personnel monitoring and waste disposal, post-criticality accident emergency procedures, etc.).

NOTE: Where the nature of the proposed activities is such as to require consideration of the applicant's financial qualifications to engage in the proposed activities in accordance with the regulations in this chapter, the Commission may request the applicant to submit information with respect to his financial qualifications.

(9) As provided by §70.25, certain applications for specific licenses filed under this part must contain a proposed decommissioning funding plan or a certification of financial assurance for decommissioning. In the case of re-

newal applications submitted on or before July 27, 1990, this submittal may follow the renewal application but must be submitted on or before July 27, 1990

(b) Each application for a license to possess special nuclear material, or to possess equipment capable of enriching uranium, or to operate an uranium enrichment facility, or to possess and use at any one time and location special nuclear material in a quantity exceeding one effective kilogram, except for applications for use as sealed sources and for those uses involved in the operation of a nuclear reactor licensed pursuant to part 50 of this chapter and those involved in a waste disposal operation, must contain a full description of the applicant's program for control and accounting of such special nuclear material or enrichment equipment that will be in the applicant's possession under license to show how compliance with the requirements of §§ 70.58, 74.31, 74.33, or 74.51 of this chapter, as applicable, will be accomplished.

#### (c) [Reserved]

- (d) The Commission may at any time after the filing of the original application, and before the expiration of the license, require further statements in order to enable the Commission to determine whether the application should be granted or denied or whether a license should be modified or revoked. All applications and statements shall be signed by the applicant or licensee or a corporate officer thereof.
- (e) Each application and statement shall contain complete and accurate disclosure as to all matters and things required to be disclosed.
- (f) Each application for a license to possess and use special nuclear material in a plutonium processing and fuel fabrication plant shall contain, in addition to the other information required by this section, a description of the plantsite, a description and safety assessment of the design bases of the principal structure, systems, and components of the plant, including provisions for protection against natural phenomena, and a description of the quality assurance program to be applied to the design, fabrication, construction, testing and operation of the

structures, systems, and components of the plant. $^2$ 

(g)(1) Each application for a license that would authorize the transport or delivery to a carrier for transport of special nuclear material in an amount specified in §73.1(b)(2) of this chapter must include (i) a description of the plan for physical protection of special nuclear material in transit in accordance with §§ 73.20, 73.25, 73.26, 73.27, and 73.67(a), (e), and (g) for 10 kg or more of special nuclear material of low strategic significance, and §73.70(g) of this chapter including, as appropriate, a plan for the selection, qualification, and training of armed escorts, or the specification and design of a specially designed truck or trailer, and (ii) a licensee safeguards contingency plan or response procedures, as appropriate, for dealing with threats, thefts, and radiological sabotage relating to the special nuclear material in transit.

- (2) Each application for such a license involving formula quantities of strategic special nuclear material must include the first four categories of information contained in the applicant's safeguards contingency plan. (The first four categories of information, as set forth in appendix C to part 73 of this chapter, are Background, Generic Planning Base, Licensee Planning Base, and Responsibility Matrix. The fifth category of information, Procedures, does not have to be submitted for approval.)
- (3) The licensee shall retain this discription of the plan for physical protection of special nuclear material in transit and the safeguards contingency plan or safeguards response procedures and each change to the plan or procedures as a record for a period of three years following the date on which the licensee last possessed the appropriate type and quantity of special nuclear material requiring this record under each license.
- (h)(1) Each application for a license to possess or use, at any site or contiguous sites subject to licensee control, a formula quantity of strategic special nuclear material, as defined in §70.4,

other than a license for possession or use of this material in the operation of a nuclear reactor licensed pursuant to part 50 of this chapter, must include a physical security plan. The plan must describe how the applicant will meet the applicable requirements of part 73 of this chapter in the conduct of the activity to be licensed, including the identification and description of jobs as required by 10 CFR 11.11(a). The plan must list tests, inspections, audits, and other means to be used to demonstrate compliance with the requirements of 10 CFR parts 11 and 73, if applicable.

(2) The licensee shall retain a copy of this physical security plan and each change to the plan as a record for a period of three years following the date on which the licensee last possessed the appropriate type and quantity of special nuclear material requiring this record under each license.

(i)(1) Each application to possess enriched uranium or plutonium for which a criticality accident alarm system is required, uranium hexafluoride in excess of 50 kilograms in a single container or 1000 kilograms total, or in excess of 2 curies of plutonium in unsealed form or on foils or plated sources, must contain either:

- (i) An evaluation showing that the maximum dose to a member of the public offsite due to a release of radioactive materials would not exceed 1 rem effective dose equivalent or an intake of 2 milligrams of soluble uranium, or
- (ii) An emergency plan for responding to the radiological hazards of an accidental release of special nuclear material and to any associated chemical hazards directly incident thereto.
- (2) One or more of the following factors may be used to support an evaluation submitted under paragraph (i)(1)(i) of this section:
- (i) The radioactive material is physically separated so that only a portion could be involved in an accident;
- (ii) All or part of the radioactive material is not subject to release during an accident or to criticality because of the way it is stored or packaged;
- (iii) In the case of fires or explosions, the release fraction would be lower than 0.001 due to the chemical or physical form of the material;

<sup>&</sup>lt;sup>2</sup>The description of the quality assurance program should include a discussion of how the criteria in appendix B of part 50 of this chapter will be met.

- (iv) The solubility of the material released would reduce the dose received;
- (v) The facility design or engineered safety features in the facility would cause the release fraction to be lower than 0.001;
- (vi) Operating restrictions or procedures would prevent a release large enough to cause a member of the public offsite to receive a dose exceeding 1 rem effective dose equivalent; or
- (vii) Other factors appropriate for the specific facility.
- (3) Emergency plans submitted under paragraph (i)(1)(ii) of this section must include the following information:
- (i) Facility description. A brief description of the licensee's facility and area near the site.
- (ii) Types of accidents. An identification of each type of radioactive materials accident for which protective actions may be needed.
- (iii) Classification of accidents. A classification system for classifying accidents as alerts or site area emergencies.
- (iv) Detection of accidents. Identification of the means of detecting each type of accident in a timely manner.
- (v) Mitigation of consequences. A brief description of the means and equipment for mitigating the consequences of each type of accident, including those provided to protect workers onsite, and a description of the program for maintaining the equipment.
- (vi) Assessment of releases. A brief description of the methods and equipment to assess releases of radioactive materials.
- (vii) Responsibilities. A brief description of the responsibilities of licensee personnel should an accident occur, including identification of personnel responsible for promptly notifying offsite response organizations and the NRC; also responsibilities for developing, maintaining, and updating the plan.

(viii) Notification and coordination. A commitment to and a brief description of the means to promptly notify offsite response organizations and request offsite assistance, including medical assistance for the treatment of contaminated injured onsite workers when appropriate. A control point must be established. The notification and coordination must be planned so

that unavailability of some personnel, parts of the facility, and some equipment will not prevent the notification and coordination. The licensee shall also commit to notify the NRC operations center immediately after notification of the appropriate offsite response organizations and not later than one hour after the licensee declares an emergency.<sup>1</sup>

(ix) Information to be communicated. A brief description of the types of information on facility status, radioactive releases, and recommended protective actions, if necessary, to be given to offsite response organizations and to the NRC.

(x) Training. A brief description of the frequency, performance objectives and plans for the training that the licensee will provide workers on how to respond to an emergency including any special instructions and orientation tours the licensee would offer to fire, police, medical and other emergency personnel. The training shall familiarize personnel with site-specific emergency procedures. Also, the training shall thoroughly prepare site personnel for their responsibilities in the event of accident scenarios postulated as most probable for the specific site, including the use of team training for such scenarios

(xi) Safe shutdown. A brief description of the means of restoring the facility to a safe condition after an accident.

(xii) Exercises. Provisions for conducting quarterly communications checks with offsite response organizations and biennial onsite exercises to test response to simulated emer-Quarterly communications gencies. checks with offsite response organizations must include the check and update of all necessary telephone numbers. The licensee shall invite offsite response organizations to participate in the biennial exercises. Participation of offsite response organizations in biennial exercises although ommended is not required. Exercises

<sup>&</sup>lt;sup>1</sup>These reporting requirements do not superceed or release licensees of complying with the requirements under the Emergency Planning and Community Right-to-Know Act of 1986, Title III, Pub. L. 99–499 or other state or federal reporting requirements.

must use accident scenarios postulated as most probable for the specific site and the scenarios shall not be known to most exercise participants. The licensee shall critique each exercise using individuals not having direct implementation responsibility for the plan. Critiques of exercises must evaluate the appropriateness of the plan, emergency facilities. procedures, equipment, training of personnel, and overall effectiveness of the response. Deficiencies found by the critiques must be corrected.

(xiii) Hazardous chemicals. A certification that the applicant has met its responsibilities under the Emergency Planning and Community Right-to-Know Act of 1986, Title III, Pub. L. 99-499, if applicable to the applicant's activities at the proposed place of use of the special nuclear material.

(4) The licensee shall allow the offsite response organizations expected to respond in case of an accident 60 days to comment on the licensee's emergency plan before submitting it to NRC. The licensee shall provide any comments received within the 60 days to the NRC with the emergency plan.

(j)(1) Each application for a license to possess or use at any site or contiguous sites subject to control by the licensee uranium-235 (contained in uranium enriched to 20 percent or more in the uranium-235 isotope), uranium-233, or plutonium alone or in any combination in a quantity of 5,000 grams or more computed by the formula, grams = (grams contained U-235) + 2.5 (grams U-233 + grams plutonium) other than a license for possession or use of this material in the operation of a nuclear reactor licensed pursuant to part 50 of this chapter, must include a licensee safeguards contingency plan for dealing with threats, thefts, and radiological sabotage, as defined in part 73 of this chapter, relating to nuclear facilities licensed under part 50 of this chapter or to the possession of special nuclear material licensed under this part.

(2) Each application for such a license must include the first four categories of information contained in the applicant's safeguards contingency plan. (The first four categories of information, as set forth in appendix C to part 73 of this chapter, are Back-

ground, Generic Planning Base, Licensee Planning Base, and Responsibility Matrix.) The fifth category of information, Procedures, does not have to be submitted for approval.

(3) The licensee shall retain a copy of this safeguards contingency plan as a record until the Commission terminates each license obtained by this application or any application for renewal of a license and retain each change to the plan as a record for three years after the date of the change.

(k) Each application for a license to possess or use at any site or contiguous sites subject to licensee control, special nuclear material of moderate strategic significance or 10 kg or more of special nuclear material of low strategic significance as defined under §70.4, other than a license for possession or use of this material in the operation of a nuclear power reactor licensed pursuant to part 50 of this chapter, must include a physical security plan that demonstrates how the applicant plans to meet the requirements of paragraphs (d), (e), (f), and (g) of §73.67 of this chapter, as appropriate. The licensee shall retain a copy of this physical security plan as a record for the period during which the licensee possesses the appropriate type and quantity of special nuclear material under each license, and if any portion of the plan is superseded, retain that superseded portion of the plan for 3 years after the effective date of the change.

(l) Each applicant for a license to possess, use, transport, or deliver to a carrier for transport formula quantities of strategic special nuclear material, who prepares a physical security, safeguards contingency, or guard qualification and training plan shall protect these plans and other related Safeguards Information against unauthorized disclosure in accordance with the requirements of §73.21 of this chapter.

(m) Each application for a license to possess equipment capable of enriching uranium or operate an enrichment facility, and produce, possess, or use more than one effective kilogram of special nuclear material at any site or contiguous sites subject to control by the applicant, must contain a full description of the applicant's security program to protect against theft, and

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to protect against unauthorized viewing of classified enrichment equipment, and unauthorized disclosure of classified matter in accordance with the requirements of 10 CFR parts 25 and 95.

(n) A license application that involves the use of special nuclear material in a uranium enrichment facility must include the applicant's provisions for liability insurance.

[21 FR 764, Feb. 3, 1956]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting \$70.22, see the List of CFR Sections Affected in the Finding Aids section of this volume.

## § 70.23 Requirements for the approval of applications.

- (a) An application for a license will be approved if the Commission determines that:
- (1) The special nuclear material is to be used for the conduct of research or development activities of a type specified in section 31 of the Act, <sup>1</sup> in activities licensed by the Commission under section 103 or 104 of the Act, or for such other uses as the Commission determines to be appropriate to carry out the purposes of the Act;
- (2) The applicant is qualified by reason of training and experience to use the material for the purpose requested in accordance with the regulations in this chapter;
- (3) The applicant's proposed equipment and facilities are adequate to

<sup>1</sup>The types of research and development activities specified in section 31 are those relating to:

(1) Nuclear processes;

(2) The theory and production of atomic energy, including processes, materials, and devices related to such production;

(3) Utilization of special nuclear material and radioactive material for medical, biological, agricultural, health or military purposes;

- (4) Utilization of special nuclear material, atomic energy, and radioactive material and processes entailed in the utilization or production of atomic energy or such material for all other purposes, including industrial use, the generation of usable energy, and the demonstration of the practical value of utilization or production facilities for industrial or commercial purposes: and
- (5) The protection of health and the promotion of safety during research and production activities.

protect health and minimize danger to life or property;

- (4) The applicant's proposed procedures to protect health and to minimize danger to life or property are adequate:
- (5) Where the nature of the proposed activities is such as to require consideration by the Commission, that the applicant appears to be financially qualified to engage in the proposed activities in accordance with the regulations in this part;
- (6) Where the applicant is required to submit a summary description of the fundamental material controls provided in his procedures for the control of and accounting for special nuclear material pursuant to \$70.22 (b)(2), the applicant's proposed controls are adequate;
- (7) Where the proposed activity is processing and fuel fabrication, scrap recovery. conversion of uranium hexafluoride, uranium enrichment facility construction and operation, or any other activity which the Commission determines will significantly affect the quality of the environment, the Director of Nuclear Material Safety and Safeguards or his designee, before commencement of construction of the plant or facility in which the activity will be conducted, on the basis of information filed and evaluations made pursuant to subpart A of part 51 of this chapter, has concluded, after weighing the environmental, economic, technical, and other benefits against environmental costs and considering available alternatives, that the action called for is the issuance of the proposed license, with any appropriate conditions to protect environmental values. Commencement of construction prior to this conclusion is grounds for denial to possess and use special nuclear material in the plant or facility. As used in this paragraph, the term 'commencement of construction' means any clearing of land, excavation, or other substantial action that would adversely affect the environment of a site. The term does not mean site exploration, roads necessary for site exploration, borings to determine foundaconditions, or other preconstruction monitoring or testing to establish background information

related to the suitability of the site or the protection of environmental values

- (8) Where the proposed activity is the operation of a plutonium processing and fuel fabrication plant, construction of the principal structures, systems, and components approved pursuant to paragraph (b) of this section has been completed in accordance with the application;
- (9) Where the applicant is required to submit a plan for physical protection of special nuclear material in transit pursuant to §70.22(g), of this chapter, the applicant's plan is adequate;
- (10) Where the applicant is required to submit a physical security plan pursuant to §70.22(h), the applicant's proposed plan is adequate;
- (11) Where the proposed activity is processing and fuel fabrication, scrap recovery, conversion of uranium hexafluoride, or involves the use of special nuclear material in a uranium enrichment facility, the applicant's proposed emergency plan is adequate.
- (12) Where the proposed activity is use of special nuclear material in a uranium enrichment facility, the applicable provisions of part 140 of this chapter have been satisfied.
- (b) The Commission will approve construction of the principal structures, systems, and components of a plutonium processing and fuel fabrication plant on the basis of information filed pursuant to §70.22(f) when the Commission has determined that the design bases of the principal structures, systems, and components, and the quality assurance program provide reasonable assurance of protection against natural phenomena and the consequences of potential accidents.3 Failure to obtain Commission approval prior to beginning of such construction may be grounds for denial of a license to possess and use special nuclear material in a plutonium processing and fuel fabrication plant.

[36 FR 17574, Sept. 2, 1971, as amended at 37 FR 5749, Mar. 21, 1972; 38 FR 30534, 30538, Nov. 6, 1973; 39 FR 26286, July 18, 1974; 42 FR 17126, Mar. 31, 1977; 43 FR 6924, Feb. 17, 1978; 49 FR 9406, Mar. 12, 1984; 54 FR 14064, Apr. 7, 1989; 57 FR 18392, Apr. 30, 1992]

## § 70.23a Hearing required for uranium enrichment facility.

The Commission will hold a hearing under 10 CFR part 2, subparts A, G, and I, on each application for issuance of a license for construction and operation of a uranium enrichment facility. The Commission will publish public notice of the hearing in the Federal Register at least 30 days before the hearing.

[57 FR 18392, Apr. 30, 1992]

### § 70.24 Criticality accident requirements.

- (a) Each licensee authorized to possess special nuclear material in a quantity exceeding 700 grams of contained uranium-235, 520 grams of uranium-233, 450 grams of plutonium, 1,500 grams of contained uranium-235 if no uranium enriched to more than 4 percent by weight of uranium-235 is present, 450 grams of any combination thereof, or one-half such quantities if massive moderators or reflectors made of graphite, heavy water or beryllium may be present, shall maintain in each area in which such licensed special nuclear material is handled, used, or stored, a monitoring system meeting the requirements of either paragraph (a)(1) or (a)(2), as appropriate, and using gamma- or neutron-sensitive radiation detectors which will energize clearly audible alarm signals if accidental criticality occurs. This section is not intended to require underwater monitoring when special nuclear material is handled or stored beneath water shielding or to require monitoring systems when special nuclear material is being transported when packaged in accordance with the requirements of part 71 of this chapter.
- (1) The monitoring system shall be capable of detecting a criticality that produces an absorbed dose in soft tissue of 20 rads of combined neutron and gamma radiation at an unshielded distance of 2 meters from the reacting material within one minute. Coverage

<sup>&</sup>lt;sup>3</sup>The criteria in appendix B of part 50 of this chapter will be used by the Commission in determining the adequacy of the quality assurance program.

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of all areas shall be provided by two detectors.

- (2) Persons licensed prior to December 6, 1974, to possess special nuclear material subject to this section may maintain a monitoring system capable of detecting a criticality which generates radiation levels of 300 rems per hour one foot from the source of the radiation. The monitoring devices in the system shall have a preset alarm point of not less than 5 millirems per hour (in order to avoid false alarms) nor more than 20 millirems per hour. In no event may any such device be farther than 120 feet from the special nuclear material being handled, used, or stored; lesser distances may be necessary to meet the requirements of this paragraph (a)(2) on account of intervening shielding or other pertinent factors.
- (3) The licensee shall maintain emergency procedures for each area in which this licensed special nuclear material is handled, used, or stored to ensure that all personnel withdraw to an area of safety upon the sounding of the alarm. These procedures must include the conduct of drills to familiarize personnel with the evacuation plan, and designation of responsible individuals for determining the cause of the alarm, and placement of radiation survey instruments in accessible locations for use in such an emergency. The licensee shall retain a copy of current procedures for each area as a record for as long as licensed special nuclear material is handled, used, or stored in the area. The licensee shall retain any superseded portion of the procedures for three years after the portion is super-
- (b) Each licensee authorized to possess special nuclear material in quantities in excess of those specified in paragraph (a) shall:
- (1) Provide the means for identifying quickly which individuals have received doses of 10 rads or more.
- (2) Maintain facilities and supplies at the site for decontamination of personnel, arrangements for the services of a physician and other medical personnel qualified to handle radiation emergencies, arrangements for transportation of injured or contaminated individuals to treatment facilities, and arrangements for treatment of individ-

uals at treatment facilities outside the site boundary.

- (c) Holders of licenses for construction or operation of a nuclear reactor issued pursuant to part 50 of this chapter, except critical assembly reactors, are exempt for the requirements of paragraph (b) of this section with respect to special nuclear material used or to be used in the reactor.
- (d) Any licensee who believes that good cause exists why he should be granted an exemption in whole or in part from the requirements of this section may apply to the Commission for such exemption. Such application shall specify his reason for the relief requested.

[39 FR 39021, Nov. 5, 1974, as amended at 41 FR 31522, July 29, 1976; 53 FR 19252, May 27, 1988]

## § 70.25 Financial assurance and recordkeeping for decommissioning.

- (a) Each applicant for a specific license of the types described in paragraphs (a)(1) and (2) of this section shall submit a decommissioning funding plan as described in paragraph (e) of this section.
- (1) A specific license for a uranium enrichment facility;
- (2) A specific license authorizing the possession and use of unsealed special nuclear material in quantities exceeding 10<sup>5</sup> times the applicable quantities set forth in appendix B to part 30. A decommissioning funding plan must also be submitted when a combination of isotopes is involved if R divided by 10<sup>5</sup> is greater than 1 (unity rule), where R is the sum of the ratios of the quantity of each isotope to the applicable value in appendix B to part 30.
- (b) Each applicant for a specific license authorizing possession and use of unsealed special nuclear material in quantities specified in paragraph (d) of this section shall either—
- (1) Submit a decommissioning funding plan as described in paragraph (e) of this section; or
- (2) Submit a certification that financial assurance for decommissioning has been provided in the amount prescribed by paragraph (d) of this section using one of the methods described in paragraph (f) of this section. For an applicant, this certification may state that

the appropriate assurance will be obtained after the application has been approved and the license issued but before the receipt of licensed material. If the applicant defers execution of the financial instrument until after the license has been issued, a signed original of the financial instrument obtained to satisfy the requirements of paragraph (f) of this section must be submitted to NRC before receipt of licensed material. If the applicant does not defer execution of the financial instrument, the applicant shall submit to NRC, as part of the certification, a signed original of the financial instrument obtained to satisfy the requirements of paragraph (f) of this section.

- (c)(1) Each holder of a specific license issued on or after July 27, 1990, which is of a type described in paragraph (a) or (b) of this section, shall provide financial assurance for decommissioning in accordance with the criteria set forth in this section.
- (2) Each holder of a specific license issued before July 27, 1990, and of a type described in paragraph (a) of this section shall submit, on or before July 27, 1990, a decommissioning funding plan as described in paragraph (e) of this section or a certification of financial assurance for decommissioning in an amount at least equal to \$750,000 in accordance with the criteria set forth in this section. If the licensee submits the certification of financial assurance rather than a decommissioning funding plan at this time, the licensee shall include a decommissioning funding plan in any application for license renewal.
- (3) Each holder of a specific license issued before July 27, 1990, and of a type described in paragraph (b) of this section shall submit, on or before July 27, 1990, a decommissioning funding plan, described in paragraph (e) of this section, or a certification of financial assurance for decommissioning in accordance with the criteria set forth in this section.
- (4) Any licensee who has submitted an application before July 27, 1990, for renewal of license in accordance with §70.33 shall provide financial assurance for decommissioning in accordance with paragraphs (a) and (b) of this section. This assurance must be submitted

when this rule becomes effective November 24, 1995.

- (d) Table of required amounts of financial assurance for decommissioning by quantity of material.
- greater than 10<sup>4</sup> but less than or equal to 10<sup>5</sup> times the applicable quantities of appendix B to part 30. (For a combination of isotopes, if R, as defined in §70.25(a), divided by 10<sup>4</sup> is greater than 1 but R divided by 10<sup>5</sup> is less than or equal to 1.)

\$750,000

greater than 10<sup>3</sup> but less than or equal to 10<sup>4</sup> times the applicable quantities of appendix B to part 30. (For a combination of isotopes, if R, as defined in §70.25(a), divided by 10<sup>3</sup> is greater than 1 but R divided by 10<sup>4</sup> is less than or equal to 1.)

\$150,000

- (e) Each decommissioning funding plan must contain a cost estimate for decommissioning and a description of the method of assuring funds for decommissioning from paragraph (f) of this section, including means for adjusting cost estimates and associated funding levels periodically over the life of the facility. The decommissioning funding plan must also contain a certification by the licensee that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning and a signed original of the financial instrument obtained to satisfy the requirements of paragraph (f) of this section.
- (f) Financial assurance for decommissioning must be provided by one or more of the following methods:
- (1) Prepayment. Prepayment is the deposit prior to the start of operation into an account segregated from licensee assets and outside the licensee's administrative control of cash or liquid assets such that the amount of funds would be sufficient to pay decommissioning costs. Prepayment may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities
- (2) A surety method, insurance, or other guarantee method. These methods guarantee that decommissioning costs will be paid. A surety method may be in the form of a surety bond,

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letter of credit, or line of credit. A parent company guarantee of funds for decommissioning costs based on a financial test may be used if the guarantee and test are as contained in appendix A of 10 CFR part 30. A parent company guarantee may not be used in combination with other financial methods to satisfy the requirements of this section. A guarantee of funds by the applicant or licensee for decommissioning costs based on a financial test may be used if the guarantee and test are as contained in appendix C of 10 CFR part 30. A guarantee by the applicant or the licensee may not be used in combination with any other financial methods to satisfy the requirements of this section or in any situation where the applicant or licensee has a parent company holding majority control of the voting stock of the company. Any surety method or insurance used to provide financial assurance for decommissioning must contain the following conditions:

- (i) The surety method or insurance must be open-ended or, if written for a specified term, such as five years, must be renewed automatically unless 90 days or more prior to the renewal date, the issurer notifies the Commission, the beneficiary, and the licensee of its intention not to renew. The surety method or insurance must also provide that the full face amount be paid to the beneficiary automatically prior to the expiration without proof of forfeiture if the licensee fails to provide a replacement acceptable to the Commission within 30 days after receipt of notification of cancellation.
- (ii) The surety method or insurance must be payable to a trust established for decommissioning costs. The trustee and trust must be acceptable to the Commission. An acceptable trustee includes an appropriate State or Federal government agency or an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.
- (iii) The surety method or insurance must remain in effect until the Commission has terminated the license.
- (3) An external sinking fund in which deposits are made at least annually, coupled with a surety method or insur-

ance, the value of which may decrease by the amount being accumulated in the sinking fund. An external sinking fund is a fund established and maintained by setting aside funds periodically in an account segregated from licensee assets and outside licenssee's administrative control in which the total amount of funds would be sufficient to pay decommissioning costs at the time termination of operation is expected. An external sinking fund may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities. The surety or insurance provisions must be as stated in paragraph (f)(2) of this section.

- (4) In the case of Federal, State, or local government licensees, a statement of intent containing a cost estimate for decommissioning or an amount based on the Table in paragraph (d) of this section, and indicating that funds for decommissioning will be obtained when necessary.
- (g) Each person licensed under this part shall keep records of information important to the decommissioning of a facility in an identified location until the site is released for unrestricted use. If records important to the decommissioning of a facility are kept for other purposes, reference to these records and their locations may be used. Information the Commission considers important to decommissioning consists of—
- (1) Records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. These records may be limited to instances when contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas as in the case of possible seepage into porous materials such as concrete. These records must include any known information on identification of involved nuclides, quantities, forms, and concentrations.
- (2) As-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used and/or stored and of locations of possible inaccessible contamination such as buried pipes which

may be subject to contamination. If required drawings are referenced, each relevant document need not be indexed individually. If drawings are not available, the licensee shall substitute appropriate records of available information concerning these areas and locations.

- (3) Except for areas containing only sealed sources (provided the sources have not leaked or no contamination remains after cleanup of any leak), a list contained in a single document and updated every 2 years, of the following:
- (i) All areas designated and formerly designated as restricted areas as defined under 10 CFR 20.1003 (For requirements prior to January 1, 1994, see 10 CFR 20.3 as contained in the CFR edition revised as of January 1, 1993.);
- (ii) All areas outside of restricted areas that require documentation under \( \}70.25(g)(1);
- (iii) All areas outside of restricted areas where current and previous wastes have been buried as documented under 10 CFR 20.2108; and
- (iv) All areas outside of restricted areas that contain material such that, if the license expired, the licensee would be required to either decontaminate the area to unrestricted release levels or apply for approval for disposal under 10 CFR 20.2002.
- (4) Records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring funds if either a funding plan or certification is used.

[53 FR 24053, June 27, 1988, as amended at 56 FR 23474, May 21, 1991; 57 FR 18393, Apr. 30, 1992; 58 FR 39634, July 26, 1993; 58 FR 67662, Dec. 22, 1993; 58 FR 68731, Dec. 29, 1993; 59 FR 1618, Jan. 12, 1994; 60 FR 38239, July 26, 1995; 61 FR 24675, May 16, 1996]

#### LICENSES

#### § 70.31 Issuance of licenses.

(a) Upon a determination that an application meets the requirements of the act and of the regulations of the Commission, the Commission will issue a license in such form and containing such conditions and limitations as it deems appropriate or necessary to effectuate the purposes of the act.

- (b) [Reserved]
- (c) Each license issued to a person for use of special nuclear material in activities in which special nuclear material will be produced shall (subject to the provisions of §70.41(b)) be deemed to authorize such person to receive title to, own, acquire, receive, possess, use, and transfer the special nuclear material produced in the course of such authorized activities.
- (d) No license will be issued by the Commission to any person within the United States if the Commission finds that the issuance of such license would be inimical to the common defense and security or would constitute an unreasonable risk to the health and safety of the public.
- (e) No license to construct and operate a uranium enrichment facility may be issued until a hearing pursuant to 10 CFR part 2, subparts G and I, is completed and decision issued on the application.

[21 FR 764, Feb. 3, 1956, as amended at 32 FR 2563, Feb. 7, 1967; 32 FR 4056, Mar. 15, 1967; 43 FR 6925, Feb. 17, 1978; 57 FR 18393, Apr. 30, 1992]

#### § 70.32 Conditions of licenses.

- (a) Each license shall contain and be subject to the following conditions:
  - (1) [Reserved]
- (2) No right to the special nuclear material shall be conferred by the license except as defined by the license;
- (3) Neither the license nor any right under the license shall be assigned or otherwise transferred in violation of the provisions of the Act;
- (4) All special nuclear material shall be subject to the right of recapture or control reserved by section 108 and to all other provisions of the Act;
- (5) No special nuclear material may be used in any utilization or production facility except in accordance with the provisions of the Act;
- (6) The licensee shall not use the special nuclear material to construct an atomic weapon or any component of an atomic weapon;
- (7) Except to the extent that the indemnification and limitation of liability provisions of part 140 of this chapter apply, the licensee will hold the United States and the Department harmless from any damages resulting

from the use or possession of special nuclear material leased from the Department by the licensee;

- (8) The license shall be subject to and the licensee shall observe, all applicable rules, regulations and orders of the Commission
- (9)(i) Each licensee shall notify the appropriate NRC Regional Administrator, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any Chapter of Title 11 (Bankruptcy) of the United States Code by or against:
  - (A) The licensee;
- (B) An entity (as that term is defined in 11 U.S.C. 101(14)) controlling the licensee or listing the license or licensee as property of the estate; or
- (C) An affiliate (as that term is defined in 11 U.S.C. 101(a)) of the licensee.
- (ii) This notification must indicate:
- (A) The bankruptcy court in which the petition for bankruptcy was filed; and
- (B) The date of the filing of the petition.
- (b) The Commission may incorporate in any license such additional conditions and requirements with respect to the licensee's ownership, receipt, possession, use, and transfer of special nuclear material as it deems appropriate or necessary in order to:
- (1) Promote the common defense and security;
- (2) Protect health or to minimize danger to life or property;
  - (3) Protect restricted data;
- (4) Guard against the loss or diversion of special nuclear material;
- (5) Require such reports and the keeping of such records, and to provide for such inspections, of activities under the license as may be necessary or appropriate to effectuate the purposes of the act and regulations thereunder.
- (c)(1) Each license authorizing the possession and use at any one time and location of uranium source material at an uranium enrichment facility or special nuclear material in a quantity exceeding one effective kilogram, except for use as sealed sources and those uses involved in the operation of a nuclear reactor licensed pursuant to part 50 of this chapter and those involved in a waste disposal operation, shall contain

and be subject to a condition requiring the licensee to maintain and follow:

- (i) The program for control and accounting of uranium source material at an uranium enrichment facility or special nuclear material and fundamental nuclear material controls implemented pursuant to §70.22(b), 70.58(1), 74.31(b), 74.33(b), or 74.51(c)(l) of this chapter, as appropriate;
- (ii) The measurement control program for uranium source material at an uranium enrichment facility or special nuclear material control and accounting implemented pursuant to \$70.57(c), 74.31(b), 74.33(b), or 74.59(e) of this chapter, as appropriate; and
- (iii) Such other material control procedures as the Commission determines to be essential for the safeguarding of uranium source material at an uranium enrichment facility or of special nuclear material and providing that the licensee shall make no change that would decrease the effectiveness of the material control and accounting proimplemented pursuant gram § 70.22(b), 70.58(l), 70.51(g), 74.31(b), 74.33(b), or 74.51(c)(1) of this chapter and the measurement control program implemented pursuant to §70.57(c), 74.31(b), 74.33(b), or 74.59(e) of this chapter without the prior approval of the Commission. A licensee desiring to make such changes shall submit an application for amendment to its license pursuant to §70.34.
- (2) The licensee shall maintain records of changes to the material control and accounting program made without prior Commission approval for a period of 5 years from the date of the change. Licensees located in all five Regions as indicated in appendix A of part 73 of this chapter, shall furnish to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, a report containing a description of each change within:
- (i) Two months of the change if it pertains to uranium-233, uranium-235 contained in uranium enriched 20 percent or more in the uranium-235 isotope, or plutonium, except plutonium containing 80 percent or more by weight of the isotope Pu-238, and
- (ii) Six months of the change if it pertains to uranium enriched less than

20 percent in the uranium-235 isotope, or plutonium containing 80 percent or more by weight of the isotope Pu-238.

(d) The licensee shall make no change which would decrease the effectiveness of the plan for physical protection of special nuclear material in transit prepared pursuant to §70.22(g) or §73.20(c) of this chapter without the prior approval of the Commission. A licensee desiring to make such changes shall submit an application for a change in the technical specifications incorporated in his or her license, if any, or for an amendment to the license pursuant to §50.90 or §70.34 of this chapter, as appropriate. The licensee may make changes to the plan for physical protection of special nuclear material without prior Commission approval if these changes do not decrease the effectiveness of the plan. The licensee shall retain a copy of the plan as a record for the period during which the licensee possesses a formula quantity of special nuclear material requiring this record under each license and each change to the plan for three years from the effective date of the change. A report containing a description of each change must be furnished the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, with a copy to the appropriate NRC Regional Office shown in appendix A to part 73 of this chapter within two months after the change.

(e) The licensee shall make no change which would decrease the effectiveness of a security plan prepared pursuant to §§ 70.22(h), 70.22(k), or 73.20(c) without the prior approval of the Commission. A licensee desiring to make such a change shall submit an application for an amendment to its license pursuant to §70.34. The licensee shall maintain records of changes to the plan made without prior Commission approval, for three years from the effective date of the change, and shall furnish to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, with a copy to the appropriate NRC Regional Office shown in appendix A to part 73 of this chapter, a report containing a description of each change within two months after the change is made.

(f) [Reserved]

(g) The licensee shall prepare and maintain safeguards contingency plan procedures in accordance with appendix C to part 73 of this chapter for bringing about the actions and decisions contained in the Responsibility Matrix of its safeguards contingency plan. The licensee shall retain the current safeguards contingency plan procedures as a record for the entire period during which the licensee possesses the appropriate type and quantity of special nuclear material under each license for which the procedures were developed and, if any portion of the plan is superseded, retain that superseded portion for 3 years after the effective date of the change. The licensee shall not make a change that would decrease the safeguards effectiveness of the first four categories of information (i.e., Background, Generic Planning Base, Licensee Planning Base, and Responsibility Matrix) contained in any licensee safeguards contingency plan prepared pursuant to §§ 70.22(g), 70.22(j), 72.184, 73.20(c), 73.26(e)(1), 73.46(h)(1), or 73.50(g)(1) of this chapter without the prior approval of the NRC. A licensee desiring to make such a change shall submit an application for an amendment to its license pursuant to §70.34. The licensee may make changes to the licensee safeguards contingency plan without prior NRC approval if the changes do not decrease the safeguards effectiveness of the plan. The licensee must maintain each change to the plan made without prior approval as a record during the period for which possession of a formula quantity of special nuclear material is authorized under a license and retain the superseded portion for 3 years after the effective date of the change and shall furnish a report containing a description of each change within 60 days after the change is made to the Director of Nuclear Material Safety and Safeguards, with a copy to the Regional Administrator of the appropriate NRC Regional Office as specified in appendix A to part 73 of this chapter.

(h) [Reserved]

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- (i) Licensees required to submit emergency plans in accordance with §70.22(i) shall follow the emergency plan approved by the Commission. The licensee may change the approved plan without Commission approval if the changes do not decrease the effectiveness of the plan. The licensee shall furnish the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, with a copy to the appropriate NRC Regional Office specified in appendix D, part 20 of this chapter and affected offsite response organizations, a copy of each change within six months after the change is made. Proposed changes that decrease the effectiveness of the approved emergency plan may not be implemented without prior application to and prior approval by the Commission.
- (j) Each licensee who possesses a formula quantity of strategic special nuclear material, or who transports, or delivers to a carrier for transport, a formula quantity of strategic special nuclear material or more than 100 grams of irradiated reactor fuel shall ensure that physical security, safeguards contingency, and guard qualification and training plans and other related Safeguards Information are protected against unauthorized disclosure in accordance with the requirements of §73.21 of this chapter.
- (k) No person may commence operation of a uranium enrichment facility until the Commission verifies through inspection that the facility has been constructed in accordance with the requirements of the license. The Commission shall publish notice of the inspection results in the FEDERAL REGISTER.

[21 FR 764, Feb. 3, 1956]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §70.32, see the List of CFR Sections Affected in the Finding Aids section of this volume.

#### § 70.33 Renewal of licenses.

(a) Applications for renewal of a license should be filed in accordance with §§ 70.21 and 70.22. Information contained in previous applications, statements or reports filed with the Commission under the license may be in-

corporated by reference: *Provided,* That such references are clear and specific.

(b) If any licensee granted the extension described in 10 CFR 70.38(a)(2) has a currently pending renewal application for that extended license, that application will be considered withdrawn by the licensee and any renewal fees paid by the licensee for that application will be refunded.

[21 FR 764, Feb. 3, 1956, as amended at 59 FR 36037, July 15, 1994; 61 FR 1115, Jan. 16, 1996]

#### § 70.34 Amendment of licenses.

Applications for amendment of a license shall be filed in accordance with §70.21(a) and shall specify the respects in which the licensee desires his license to be amended and the grounds for such amendment.

## § 70.35 Commission action on applications to renew or amend.

In considering an application by a licensee to renew or amend his license, the Commission will apply the criteria set forth in §70.23.

#### § 70.36 Inalienability of licenses.

No license granted under the regulations in this part and no right to possess or utilize special nuclear material granted by any license issued pursuant to the regulations in this part shall be transferred, assigned or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person unless the Commission shall after securing full information, find that the transfer is in accordance with the provisions of the Act, and shall give its consent in writing.

[21 FR 764, Feb. 3, 1956, as amended at 35 FR 11461, July 17, 1970]

#### § 70.37 Disclaimer of warranties.

Neither the Government nor the Commission makes any warranty or other representation that special nuclear material (a) will not result in injury or damage when used for purposes approved by the Commission, (b) will accomplish the results for which it is requested and approved by the Commission, or (c) is safe for any other use.

# § 70.38 Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas.

- (a)(1) Except as provided in paragraph (a)(2) of this section, each specific license expires at the end of the day on the expiration date stated in the license unless the licensee has filed an application for renewal under §70.33 not less than 30 days before the expiration date stated in the existing license (or, for those licenses subject to paragraph (a)(2) of this section, 30 days before the deemed expiration date in that paragraph). If an application for renewal has been filed at least 30 days before the expiration date stated in the existing license (or, for those licenses subject to paragraph (a)(2) of this section, 30 days before the deemed expiration date in that paragraph), the existing license expires at the end of the day on which the Commission makes a final determination to deny the renewal application or, if the determination states an expiration date, the expiration date stated in the determina-
- (2) Each specific license that has an expiration date after July 1, 1995, and is not one of the licenses described in paragraph (a)(3) of this section, shall be deemed to have an expiration date that is five years after the expiration date stated in the current license.
- (3) The following specific licenses are not subject to, nor otherwise affected by, the provisions of paragraph (a)(2) of this section:
- (i) Specific licenses for which, on February 15, 1996, an evaluation or an emergency plan is required in accordance with §70.22(i);
- (ii) Specific licenses whose holders are subject to the financial assurance requirements specified in 10 CFR 70.25, and on February 15, 1996, the holders either:
- (A) Have not submitted a decommissioning funding plan or certification of financial assurance for decommissioning; or
- (B) Have not received written notice that the decommissioning funding plan or certification of financial assurance for decommissioning is acceptable;
- (iii) Specific licenses whose holders are listed in the SDMP List published

- in NUREG 1444, Supplement 1 (November 1995);
- (iv) Specific licenses whose issuance, amendment or renewal, as of February 15, 1996, is not a categorical exclusion under 10 CFR 51.22(c)(14) and, therefore, need an environmental assessment or environmental impact statement pursuant to Subpart A of Part 51 of this chapter;
- (v) Specific licenses whose holders have not had at least one NRC inspection of licensed activities before February 15, 1996;
- (vi) Specific licenses whose holders, as the result of the most recent NRC inspection of licensed activities conducted before February 15, 1996, have been:
- (A) Cited for a Severity Level I, II, or III violation in a Notice of Violation:
- (B) Subject to an Order issued by the NRC; or
- (C) Subject to a CAL issued by the NRC.
- (vii) Specific licenses with expiration dates before July 1, 1995, for which the holders have submitted applications for renewal under 10 CFR 70.33 of this part.
- (viii) Specific licenses issued pursuant to 10 CFR 70.31 that, as of February 15, 1996, are also subject to the requirements in § 70.24.
- (b) Each specific license revoked by the Commission expires at the end of the day on the date of the Commission's final determination to revoke the license, or on the expiration date stated in the determination, or as otherwise provided by Commission Order.
- (c) Each specific license continues in effect, beyond the expiration date if necessary, with respect to possession of special nuclear material until the Commission notifies the licensee in writing that the license is terminated. During this time, the licensee shall—
- (1) Limit actions involving special nuclear material to those related to decommissioning; and
- (2) Continue to control entry to restricted areas until they are suitable for release in accordance with NRC requirements.
- (d) Within 60 days of the occurrence of any of the following, consistent with the administrative directions in §70.5, each licensee shall provide notification

to the NRC in writing and either begin decommissioning its site, or any separate building or outdoor area that contains residual radioactivity, so that the building or outdoor area is suitable for release in accordance with NRC requirements, or submit within 12 months of notification a decommissioning plan, if required by paragraph (g)(1) of this section, and begin decommissioning upon approval of that plan if

- (1) The license has expired pursuant to paragraph (a) or (b) of this section; or
- (2) The licensee has decided to permanently cease principal activities, as defined in this part, at the entire site or in any separate building or outdoor area; or
- (3) No principal activities under the license have been conducted for a period of 24 months; or
- (4) No principal activities have been conducted for a period of 24 months in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with NRC requirements.
- (e) Coincident with the notification required by paragraph (d) of this section, the licensee shall maintain in effect all decommissioning financial assurances established by the licensee pursuant to §30.35 in conjunction with a license issuance or renewal or as required by this section. The amount of the financial assurance must be increased, or may be decreased, as appropriate, to cover the detailed cost estimate for decommissioning established pursuant to paragraph (g)(4)(v) of this section.
- (1) Any licensee who has not provided financial assurance to cover the detailed cost estimate submitted with the decommissioning plan shall do so when this rule becomes effective November 24, 1995.
- (2) Following approval of the decommissioning plan, a licensee may reduce the amount of the financial assurance as decommissioning proceeds and radiological contamination is reduced at the site with the approval of the Commission.
- (f) The Commission may grant a request to delay or postpone initiation of

the decommissioning process if the Commission determines that this relief is not detrimental to the public health and safety and is otherwise in the public interest. The request must be submitted no later than 30 days before notification pursuant to paragraph (d) of this section. The schedule for decommissioning set forth in paragraph (d) of this section may not commence until the Commission has made a determination on the request.

- (g)(1) A decommissioning plan must be submitted if required by license condition or if the procedures and activities necessary to carry out decommissioning of the site or separate building or outdoor area have not been previously approved by the Commission and these procedures could increase potential health and safety impacts to workers or to the public, such as in any of the following cases:
- (i) Procedures would involve techniques not applied routinely during cleanup or maintenance operations;
- (ii) Workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation;
- (iii) Procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or
- (iv) Procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.
- (2) The Commission may approve an alternate schedule for submittal of a decommissioning plan required pursuant to paragraph (d) of this section if the Commission determines that the alternative schedule is necessary to the effective conduct of decommissioning operations and presents no undue risk from radiation to the public health and safety and is otherwise in the public interest.
- (3) The procedures listed in paragraph (g)(1) of this section may not be carried out prior to approval of the decommissioning plan.
- (4) The proposed decommissioning plan for the site or separate building or outdoor area must include:
- (i) A description of the conditions of the site or separate building or outdoor

area sufficient to evaluate the acceptability of the plan;

- (ii) A description of planned decommissioning activities;
- (iii) A description of methods used to ensure protection of workers and the environment against radiation hazards during decommissioning;
- (iv) A description of the planned final radiation survey; and
- (v) An updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and a plan for assuring the availability of adequate funds for completion of decommissioning.
- (vi) A description of the physical security plan and material control and accounting plan provisions in place during decommissioning.
- (vii) For decommissioning plans calling for completion of decommissioning later than 24 months after plan approval, a justification for the delay based on the criteria in paragraph (i) of this section.
- (5) The proposed decommissioning plan will be approved by the Commission if the information therein demonstrates that the decommissioning will be completed as soon as practical and that the health and safety of workers and the public will be adequately protected.
- (h)(1) Except as provided in paragraph (i) of this section, licensees shall complete decommissioning of the site or separate building or outdoor area as soon as practicable but no later than 24 months following the initiation of decommissioning.
- (2) Except as provided in paragraph (i) of this section, when decommissioning involves the entire site, the licensee shall request license termination as soon as practicable but no later than 24 months following the initiation of decommissioning.
- (i) The Commission may approve a request for an alternate schedule for completion of decommissioning of the site or separate building or outdoor area, and license termination if appropriate, if the Commission determines that the alternative is warranted by consideration of the following:

- (1) Whether it is technically feasible to complete decommissioning within the allotted 24-month period;
- (2) Whether sufficient waste disposal capacity is available to allow completion of decommissioning within the allotted 24-month period;
- (3) Whether a significant volume reduction in wastes requiring disposal will be achieved by allowing short-lived radionuclides to decay;
- (4) Whether a significant reduction in radiation exposure to workers can be achieved by allowing short-lived radionuclides to decay; and
- (5) Other site-specific factors which the Commission may consider appropriate on a case-by-case basis, such as regulatory requirements of other government agencies, lawsuits, groundwater treatment activities, monitored natural ground-water restoration, actions that could result in more environmental harm than deferred cleanup, and other factors beyond the control of the licensee.
- (j) As the final step in decommissioning, the licensee shall—  $\,$
- (1) Certify the disposition of all licensed material, including accumulated wastes, by submitting a completed NRC Form 314 or equivalent information; and
- (2) Conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey unless the licensee demonstrates that the premises are suitable for release in some other manner. The licensee shall, as appropriate—
- (i) Report levels of gamma radiation in units of millisieverts (microroentgen) per hour at one meter from surfaces, and report levels of radioactivity, including alpha and beta, in units of megabecquerels (disintegrations per minute or microcuries) per 100 square centimeters removable and fixed for surfaces, megabecquerels (microcuries) per milliliter for water, and becquerels (picocuries) per gram for solids such as soils or concrete; and
- (ii) Specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.
- (k) Specific licenses, including expired licenses, will be terminated by

written notice to the licensee when the Commission determines that:

- (1) Special nuclear material has been properly disposed;
- (2) Reasonable effort has been made to eliminate residual radioactive contamination, if present; and
- (3)(i) A radiation survey has been performed which demonstrates that the premises are suitable for release in accordance with NRC requirements; or
- (ii) Other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with NRC requirements.
- (4) Records required by §70.51(b)(6) have been received.

[59 FR 36037, July 15, 1994, as amended at 60 FR 38240, July 26, 1995; 61 FR 1115, Jan. 16, 1996; 61 FR 24675, May 16, 1996; 61 FR 29637, 29638, June 12, 1996]

## § 70.39 Specific licenses for the manufacture or initial transfer of calibration or reference sources.

- (a) An application for a specific license to manufacture or initially transfer calibration or reference sources containing plutonium, for distribution to persons generally licensed under §70.19, will be approved if:
- (1) The applicant satisfies the general requirements of § 70.23.
- (2) The applicant submits sufficient information regarding each type of calibration or reference source pertinent to evaluation of the potential radiation exposure, including:
- (i) Chemical and physical form and maximum quantity of plutonium in the source:
- (ii) Details of construction and design;
- (iii) Details of the method of incorporation and binding of the plutonium in the source;
- (iv) Procedures for and results of prototype testing of sources, which are designed to contain more than 0.005 microcurie of plutonium, to demonstrate that the plutonium contained in each source will not be released or be removed from the source under normal conditions of use;
- (v) Details of quality control procedures to be followed in manufacture of the source:

- (vi) Description of labeling to be affixed to the source or the storage container for the source;
- (vii) Any additional information, including experimental studies and tests, required by the Commission to facilitate a determination of the safety of the source.
- (3) Each source will contain no more than 5 microcuries of plutonium.
- (4) The Commission determines, with respect to any type of source containing more than 0.005 microcurie of plutonium, that:
- (i) The method of incorporation and binding of the plutonium in the source is such that the plutonium will not be released or be removed from the source under normal conditions of use and handling of the source; and
- (ii) The source has been subjected to and has satisfactorily passed the prototype tests prescribed by paragraph (a) (5) of this section.
- (5) For any type of source which is designed to contain more than 0.005 microcurie of plutonium, the applicant has conducted prototype tests, in the order listed, on each of five prototypes of such source, which contains more than 0.005 microcurie of plutonium, as follows:
- (i) *Initial measurement*. The quantity of radioactive material deposited on the source shall be measured by direct counting of the source.
- (ii) Dry wipe test. The entire radioactive surface of the source shall be wiped with filter paper with the application of moderate finger pressure. Removal of radioactive material from the source shall be determined by measuring the radioactivity on the filter paper or by direct measurement of the radioactivity on the source following the dry wipe.
- (iii) Wet wipe test. The entire radioactive surface of the source shall be wiped with filter paper, moistened with water, with the application of moderate finger pressure. Removal of radioactive material from the source shall be determined by measuring the radioactivity on the filter paper after it has dried or by direct measurement of the radioactivity on the source following the wet wipe.

- (iv) Water soak test. The source shall be immersed in water at room temperature for a period of 24 consecutive hours. The source shall then be removed from the water. Removal of radioactive material from the source shall be determined by direct measurement of the radioactivity on the source after it has dried or by measuring the radioactivity in the residue obtained by evaporation of the water in which the source was immersed.
- (v) Dry wipe test. On completion of the preceding tests in paragraphs (a)(5)(i) through (iv) of this section, the dry wipe test described in paragraph (a)(5)(ii) of this section shall be repeated.
- (vi) Observations. Removal of more than 0.005 microcurie of radioactivity in any test prescribed by this paragraph shall be cause for rejection of the source design. Results of prototype tests submitted to the Commission shall be given in terms of radioactivity in microcuries and percent of removal from the total amount of radioactive material deposited on the source.
- (b) Each person licensed under this section shall affix to each source, or storage container for the source, a label which shall contain sufficient information relative to safe use and storage of the source and shall include the following statement or a substantially similar statement which contains the information called for in the following statement.<sup>1</sup>

The receipt, possession, use and transfer of this source, Model ——, Serial No. ——, are subject to a general license and the regulations of the United States Nuclear Regulatory Commission or of a State with which the Commission has entered into an agreement for the exercise of regulatory authority. Do not remove this label.

CAUTION—RADIOACTIVE MATERIAL—THIS SOURCE CONTAINS PLUTONIUM. DO NOT TOUCH RADIOACTIVE PORTION OF THIS SOURCE.

(Name of Manufacturer or Initial Transferor)

(c) Each person licensed under this section shall perform a dry wipe test upon each source containing more than 0.1 microcurie of plutonium prior to transferring the source to a general licensee under §70.19. This test shall be performed by wiping the entire radioactive surface of the source with a filter paper with the application of moderate finger pressure. The radioactivity on the paper shall be measured by using radiation detection instrumentation capable of detecting 0.005 microcurie of plutonium. If any such test discloses more than microcurie of radioactive material, the source shall be deemed to be leaking or losing plutonium and shall not be transferred to a general licensee under § 70.19.

[29 FR 5884, May 5, 1964, as amended at 32 FR 2563, Feb. 7, 1967; 38 FR 1272, Jan. 11, 1973; 40 FR 8792, Mar. 3, 1975; 42 FR 43966, Sept. 1, 1977; 43 FR 6925, Feb. 17, 1978]

Acquisition, Use and Transfer of Special Nuclear Material, Creditors' Rights

## § 70.41 Authorized use of special nuclear material.

- (a) Each licensee shall confine his possession and use of special nuclear material to the locations and purposes authorized in his license. Except as otherwise provided in the license, each license issued pursuant to the regulations in this part shall carry with it the right to receive title to, own, acquire, receive, possess and use special nuclear material. Preparation for shipment and transport of special nuclear material shall be in accordance with the provisions of part 71 of this chapter.
- (b) The possession, use and transfer of any special nuclear material produced by a licensee, in connection with or as a result of use of special nuclear material received under his license, shall be subject to the provisions of the license and the regulations in this part.

[21 FR 764, Feb. 3, 1956, as amended at 38 FR 33970, Dec. 10, 1973; 43 FR 6925, Feb. 17, 1978]

## § 70.42 Transfer of special nuclear material.

(a) No licensee shall transfer special nuclear material except as authorized pursuant to this section.

 $<sup>^1</sup>$ Sources generally licensed under this section prior to January 19, 1975 may bear labels authorized by the regulations in effect on January 1, 1975.

- (b) Except as otherwise provided in his license and subject to the provisions of paragraphs (c) and (d) of this section, any licensee may transfer special nuclear material:
  - (1) To the Department;
- (2) To the agency in any Agreement State which regulates radioactive materials pursuant to an agreement with the Commission or the Atomic Energy Commission under section 274 of the Act, if the quantity transferred is not sufficient to form a critical mass;
- (3) To any person exempt from the licensing requirements of the Act and regulations in this part, to the extent permitted under such exemption;
- (4) To any person in an Agreement State, subject to the jurisdiction of that State, who has been exempted from the licensing requirements and regulations of that State, to the extent permitted under such exemption;
- (5) To any person authorized to receive such special nuclear material under terms of a specific license or a general license or their equivalents issued by the Commission or an Agreement State;
- (6) To any person abroad pursuant to an export license issued under part 110 of this chapter; or
- (7) As otherwise authorized by the Commission in writing.
- (c) Before transferring special nuclear material to a specific licensee of the Commission or an Agreement State or to a general licensee who is required to register with the Commission or with an Agreement State prior to receipt of the special nuclear material, the licensee transferring the material shall verify that the transferee's license authorizes receipt of the type, form, and quantity of special nuclear material to be transferred.
- (d) The following methods for the verification required by paragraph (c) of this section are acceptable:
- (1) The transferor may have in his or her possession, and read, a current copy of the transferee's specific license or registration certificate. The transferor shall retain a copy of each license or certificate for three years from the date that it was obtained.
- (2) The transferor may have in its possession a written certification by the transferee that the transferee is

- authorized by license or registration certificate to receive the type, form, and quantity of special nuclear material to be transferred, specifying the license or registration certificate number, issuing agency, and expiration date. The transferor shall retain the written certification as a record for three years from the date of receipt of the certification;
- (3) For emergency shipments the transferor may accept oral certification by the transferee that he or she is authorized by license or registration certification to receive the type, form, and quantity of special nuclear material to be transferred, specifying the license or registration certificate number, issuing agency, and expiration date, provided that the oral certification is confirmed in writing within ten days. The transferor shall retain the written confirmation of the oral certification for three years from the date of receipt of the confirmation;
- (4) The transferor may obtain other sources of information compiled by a reporting service from official records of the Commission or the licensing agency of an Agreement State as to the identity of licensees and the scope and expiration dates of licenses and registrations. The transferor shall retain the compilation of information as a record for three years from the date that it was obtained; or
- (5) When none of the methods of verification described in paragraphs (d) (1) to (4) of this section are readily available or when a transferor desires to verify that information received by one of these methods is correct or up-to-date, the transferor may obtain and record confirmation from the Commission or the licensing agency of an Agreement State that the transferee is licensed to receive the special nuclear material. The transferor shall retain the record of confirmation for three years from the date the record is made.

[38 FR 33970, Dec. 10, 1973, as amended at 40 FR 8792, Mar. 3, 1975; 43 FR 6925, Feb. 21, 1978; 53 FR 19253, May 27, 1988]

#### § 70.44 Creditor regulations.

(a) Pursuant to section 184 of the Act, the Commission consents, without individual application, to the creation of any mortgage, pledge, or other lien upon any special nuclear material, not owned by the United States, which is subject to licensing: *Provided:* 

- (1) That the rights of any creditor so secured may be exercised only in compliance with and subject to the same requirements and restrictions as would apply to the licensee pursuant to the provisions of the license, the Atomic Energy Act of 1954, as amended, and regulations issued by the Commission pursuant to said Act; and
- (2) That no creditor so secured may take possession of the special nuclear material pursuant to the provisions of this section prior to either the issuance of a license by the Commission authorizing such possession or the transfer of a license pursuant to §70.36.
- (b) Nothing contained in this section shall be deemed to affect the means of acquiring, or the priority of, any tax lien or other lien provided by law.
- (c) As used in this section, *creditor* includes, without implied limitation, the trustee under any mortgage, pledge, or lien on special nuclear material made to secure any creditor, any trustee or receiver of the special nuclear material appointed by a court of competent jurisdiction in any action brought for the benefit of any creditor secured by such mortgage, pledge, or lien, any purchaser of such special nuclear material at the sale thereof upon foreclosure of such mortgage, pledge, or lien or upon exercise of any power of sale contained therein, or any assignee of any such purchaser.

[32 FR 2563, Feb. 7, 1967, as amended at 35 FR 11461, July 17, 1970]

SPECIAL NUCLEAR MATERIAL CONTROL, RECORDS, REPORTS AND INSPECTIONS

#### § 70.50 Reporting requirements.

(a) Immediate report. Each licensee shall notify the NRC as soon as possible but not later than 4 hours after the discovery of an event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits or releases of licensed material that could exceed regulatory limits (events may include fires, explosions, toxic gas releases, etc.).

- (b) Twenty-four hour report. Each licensee shall notify the NRC within 24 hours after the discovery of any of the following events involving licensed material:
- (1) An unplanned contamination event that:
- (i) Requires access to the contaminated area, by workers or the public, to be restricted for more than 24 hours by imposing additional radiological controls or by prohibiting entry into the area:
- (ii) Involves a quantity of material greater than five times the lowest annual limit on intake specified in Appendix B of §§ 20.1001-20.2401 of 10 CFR part 20 for the material; and
- (iii) Has access to the area restricted for a reason other than to allow isotopes with a half-life of less than 24 hours to decay prior to decontamination.
- (2) An event in which equipment is disabled or fails to function as designed when:
- (i) The equipment is required by regulation or licensee condition to prevent releases exceeding regulatory limits, to prevent exposures to radiation and radioactive materials exceeding regulatory limits, or to mitigate the consequences of an accident;
- (ii) The equipment is required to be available and operable when it is disabled or fails to function; and
- (iii) No redundant equipment is available and operable to perform the required safety function.
- (3) An event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.
- (4) An unplanned fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material when:
- (i) The quantity of material involved is greater than five times the lowest annual limit on intake specified in appendix B of §§ 20.1001–20.2401 of 10 CFR part 20 for the material; and
- (ii) The damage affects the integrity of the licensed material or its container.

#### § 70.51

- (c) Preparation and submission of reports. Reports made by licensees in response to the requirements of this section must be made as follows:
- (1) Licensees shall make reports required by paragraphs (a) and (b) of this section by telephone to the NRC Operations Center. To the extent that the information is available at the time of notification, the information provided in these reports must include:
- (i) The caller's name and call back telephone number;
- (ii) A description of the event, including date and time;
  - (iii) The exact location of the event;
- (iv) The isotopes, quantities, and chemical and physical form of the licensed material involved; and
- (v) Any personnel radiation exposure data available.
- (2) Written report. Each licensee who makes a report required by paragraph (a) or (b) of this section shall submit written follow-up report within 30 days of the initial report. Written reports prepared pursuant to other regulations may be submitted to fulfill this requirement if the reports contain all of the necessary information and the appropriate distribution is made. These written reports must be sent to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, with a copy to the appropriate NRC regional office listed in appendix D of 10 CFR part 20. The reports must include the following:
- (i) A description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;
  - (ii) The exact location of the event;
- (iii) The isotopes, quantities and chemical and physical form of the licensed material involved;
  - (iv) Date and time of the event;
- (v) Corrective actions taken or planned and the results of any evaluations or assessments; and
- (vi) The extent of exposure of individuals to radiation or to radioactive materials without identification of individuals by name.

- (3) The provisions of §70.50 do not apply to licensees subject to the notification requirements in §50.72. They do apply to those part 50 licensees possessing material licensed under part 70 who are not subject to the notification requirements in §50.72.
- [56 FR 40769, Aug. 16, 1991; 56 FR 64980, Dec. 13, 1991, as amended at 59 FR 14087, Mar. 25, 1994]

## § 70.51 Material balance, inventory, and records requirements.

- (a) As used in this section:
- (1) Additions to material in process means receipts that are opened except for receipts opened only for sampling and subsequently maintained under tamper-safing, and opened sealed sources.
- (2) Enrichment category for uranium-235 means high-enriched uranium—that uranium whose isotope content is 20 percent or more uranium-235 by weight, and low-enriched uranium—that uranium whose isotope content is less than 20 percent uranium-235 by weight.
- (3) *Element* means uranium or plutonium.
- (4) Fissile isotope means (i) uranium-233 or (ii) uranium-235 by enrichment category.
- (5) Limit of error means the uncertainty component used in constructing a 95 percent confidence interval associated with a quantity after any recognized bias has been eliminated or its effect accounted for.
- (6) Material balance means a determination of material unaccounted for (MUF) by subtracting ending inventory (EI) plus removals (R) from beginning inventory (BI) plus additions to inventory (A). Mathematically,

#### MUF = BI + A - EI - R

- (7) Material in process means any special nuclear material possessed by the licensee except in unopened receipts, sealed sources, and ultimate product maintained under tamper-safing.
- (8) Physical inventory means determination on a measured basis of the quantity of special nuclear material on hand at a given time. The methods of physical inventory and associated measurements will vary depending on

 $<sup>^{1}\</sup>mathrm{The}$  commercial telephone number for the NRC Operations Center is (301) 816–5100.

the material to be inventoried and the process involved.<sup>1</sup>

- (9) Removals from material in process includes measured quantities of special nuclear material disposed of as discards, encapsulated as a sealed source, or in other ultimate product placed under tamper-safing or shipped offsite.
- (10) Tamper-safing means the use of devices on containers or vaults in a manner and at a time that ensures a clear indication of any violation of the integrity of previously made measurements of special nuclear material within the container or vault.
- (11) *Ultimate product* means any special nuclear material in the form of a product that would not be further processed at that licensed location.
- (12) *Unopened receipts* means receipts not opened by the licensee, including receipts of sealed sources, and receipts opened only for sampling and subsequently maintained under tampersafing.
- (b) Licensees subject to the record-keeping requirements of §§ 74.31, 74.33 and 74.59 of this chapter are exempt from the requirements of § 70.51(b) (1) through (5). Otherwise:
- (1) Each licensee shall keep records showing the receipt, inventory (including location), disposal, acquisition, and transfer of all special nuclear material in his possession regardless of its origin or method of acquisition.
- (2) Each record that is required by the regulations in this part or by license condition must be maintained and retained for the period specified by the appropriate regulation or license condition. If a retention period is not otherwise specified by regulation or license condition, the licensee shall retain the record until the Commission terminates each license that authorizes the activity that is subject to the recordkeeping requirement.
- (3) Each record of receipt, acquisition, or physical inventory of special nuclear material that must be maintained pursuant to paragraph (b)(1) of this section must be retained as long as the licensee retains possession of the material and for three years following transfer of such material.

- (4) [Reserved]
- (5) Each record of transfer of special nuclear material to other persons must be retained by the licensee who transferred the material until the Commission terminates the license authorizing the licensee's possession of the material. Each record required by paragraph (e)(1)(v) of this section must be retained for three years after it is made.
- (6) Prior to license termination, licensees shall forward the following records to the appropriate NRC Regional Office:
- (i) Records of disposal of licensed material made under §20.2002 (including burials authorized before January 28, 1981<sup>2</sup>), 20.2003, 20.2004, 20.2005;
- (ii) Records required by  $\S 20.2103(b)(4)$ ; and
  - (iii) Records required by §70.25(g).
- (7) If licensed activities are transferred or assigned in accordance with §70.32(a)(3), the licensee shall transfer the following records to the new licensee and the new licensee will be responsible for maintaining these records until the license is terminated:
- (i) Records of disposal of licensed material made under §20.2002 (including burials authorized before January 28, 1981<sup>2</sup>), 20.2003, 20.2004, 20.2005;
- (ii) Records required by  $\S 20.2103(b)(4)$ ; and
  - (iii) Records required by §70.25(g).
- (c) Each licensee who is authorized to possess at any one time special nuclear material in a quantity exceeding one effective kilogram of special nuclear material shall establish, maintain, and follow written material control and accounting procedures that are sufficient to enable the licensee to account for the special nuclear material in the licensee's possession under license. The licensee shall retain these procedures until the Commission terminates the license that authorizes possession of the material and retain any superseded portion of the procedures for three years after the portion is superseded.
- (d) Except as required by paragraph (e) of this section, each licensee who is

<sup>&</sup>lt;sup>1</sup>Criteria for physical inventories are set out in paragraph (f) of this section.

<sup>&</sup>lt;sup>2</sup>A previous §20.304 permitted burial of small quantities of licensed materials in soil before January 28, 1981, without specific Commission authorization. See §20.304 contained in the 10 CFR, parts 0 to 199, edition revised as of January 1, 1981.

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authorized to possess at any one time and location special nuclear material in a quantity totaling more than 350 grams of contained uranium-235, uranium-233, or plutonium, or any combination thereof, shall conduct a physical inventory of all special nuclear material in his possession under license at intervals not to exceed twelve months.

- (e) Each licensee who is authorized to possess at any one time special nuclear material in a quantity exceeding one effective kilogram of strategic special nuclear material in irradiated fuel reprocessing operations or special nuclear material of moderate strategic significance and to use such special nuclear material for activities other than as sealed sources or those activities involved in the operation of a nuclear reactor licensed pursuant to part 50 of this chapter or those involved in a waste disposal operation; or as reactor irradiated fuels involved in research, development, and evaluation programs in facilities other than irradiated fuel reprocessing plants, shall:
- (1) Maintain procedures that include items listed in paragraphs (e)(1)(i), (ii), (iii), (iii), (iv), (v), (vi), and (vii) of this section and retain each record required in these paragraphs for three years after the record is made.
- (i) Procedures for tamper-safing containers or vaults containing special nuclear material not in process, which include control of access to the devices and records of the date and time of application of each device to a container or vault; unique identification of each such item; inventory records showing the identity, location, and quantity of special nuclear material for all such items; and records of the source and disposition of all such items;
- (ii) Records of the quantities of special nuclear material added to or removed from the process;
- (iii) Inventory records for the quantity of special nuclear material in process;
- (iv) Unique identification of items or containers containing special nuclear material in process; inventory records showing the identity, location, and quantity of special nuclear material for all such items; and records of the

source and disposition of all such items:

- (v) Documentation of all transfers of special nuclear material between material balance areas to show identity and quantity of special nuclear material transferred;
- (vi) Requirements for authorized signatures on each document for transfer of special nuclear material between material balance areas; and
- (vii) Means for control of and accounting for internal transfer documents.
- (2) On or before May 6, 1974, and thereafter as necessary to comply with the requirements of paragraph (e)(3) of this section, perform a physical inventory of all special nuclear material in his possession in compliance with the criteria for physical inventories set forth in paragraph (f) of this section.
- (3) Conduct physical inventories made in accordance with the criteria for physical inventories set forth in paragraph (f) of this section at intervals determined from the start of the beginning inventory to the start of the ending inventory not to exceed:
- (i) 2 calendar months for plutonium except for plutonium containing 80 percent or more by weight of the isotope Pu-238, uranium-233 and for uranium enriched 20 percent or more in the isotope uranium-235 (except as provided in paragraph (e)(3)(ii) of this section); and
- (ii) 6 calendar months for uranium enriched less than 20 percent in the isotope uranium-235; for plutonium, U-233 and high-enriched uranium in that portion of an irradiated-fuel reprocessing plant from the dissolver to the first vessel outside of the radiation shielded portion of the process; and for plutonium containing 80 percent or more by weight of the isotope Pu-238;
- (4) Within 30 calendar days after the start of each ending physical inventory required by paragraph (e)(3) of this section:
- (i) Calculate, for the material balance interval terminated by that inventory, the material unaccounted for (MUF) and its associated limit of error for each element and the fissile isotope for uranium contained in material in process;
- (ii) Reconcile and adjust the book record of quantity of element and

fissile isotope, as appropriate, to the results of the physical inventory;

(iii) Complete and maintain for a period of five years material balance records for each material balance showing the quantity of element and fissile isotope, as appropriate, in each component of the material balance, with the associated limit of error for the material unaccounted for both in terms of absolute quantity of element and fissile isotope and relative to additions to or removals from material in process for the interval, where results of limit of error calculations are recorded in sufficient detail to permit an evaluation of sources of error.

(iv) Complete and maintain for a period of five years a record summarizing the quantities of element and fissile isotope, as appropriate, for ending inventory of material in process, additions to material in process during the material balance interval and removals from the material in process during the material balance interval; and

(v) Complete and maintain for a period of five years a record summarizing the quantities of element and fissile isotope, as appropriate, in unopened receipts (including receipts opened only for sampling and subsequently maintained under tamper-safing), and ultimate products maintained under tamper-safing, or in the form of sealed sources;

(5) Establish and maintain a system of control and accountability such that the limits of error for any material unaccounted for (MUF) ascertained as a result of the material balances made pursuant to paragraph (e)(3) of this section do not exceed (i) 200 grams of plutonium or uranium-233, 300 grams of high enriched uranium or uranium-235 contained in high enriched uranium, or 9,000 grams of uranium-235 contained in low enriched uranium, (ii) those limits specified in the following table, or (iii) other limits authorized by the Commission pursuant to paragraph (e)(6) of this section:

Material Type	Limit of Error of MUF on Any Total Plant Inprocess Material Balance <sup>3</sup> Percent
Plutonium element or uranium-233 in a chemical reprocessing plant	1.0
Uranium element and fissile isotope in a reprocessing plant	0.7
Plutonium element, uranium-233, or high enriched uranium element and fissile isotope—all other	0.5
Low-enriched uranium element and fissile iso- tope—all other	0.5

<sup>&</sup>lt;sup>3</sup> As a percentage of additions to or removals from material in process, whichever is greater.

Any licensee subject to this paragraph on December 6, 1973, who requests higher limits pursuant to paragraph (e)(6) of this section at the time he submits his program description under the provisions of paragraph (g) of this section is hereby authorized to operate at the higher limits until the application for license or amendment has been finally determined by the Commission;

- (6) An applicant or a licensee subject to the requirements of paragraph (e) of this section may request limits higher than those specified in paragraph (e)(5) of this section. The requested higher limits shall be based on considerations such as the type and complexity of process, the number of unit operations, process throughput quantities, process recycle quantities, and the technology available and applicable to the control and accounting of the material in the process. The Commission will approve higher limits if the applicant demonstrates:
- (i) That he has made reasonable efforts and cannot meet the limits of error of MUF specified in paragraph (e)(5) of this section; and
- (ii) That he has initiated or will initiate a program to achieve improvements in his material control system so as to meet the limits specified in paragraph (e)(5) of this section.
- (f) Each licensee subject to the requirements of paragraph (e) of this section shall:

- (1) Establish physical inventory procedures to assure that:
- (i) The quantity of special nuclear material associated with each item on inventory is a measured value;
- (ii) Each item on inventory is listed and identified to assure that all items are listed and that no item is listed more than once;
- (iii) Cutoff procedures for transfers and processing are established so that all quantities are inventoried and none are inventoried more than once;
- (iv) Cutoff procedures for records and reports are established so that all transfers for the inventory and material balance interval and no others are included in the records; and
- (v) Upon completion of the inventory, all book and inventory records, both total plant and material balance area, are reconciled with and adjusted to the physical inventory.
- (2) Establish inventory procedures for sealed sources and containers or vaults containing special nuclear material that provide for:
- (i) Identification and location of all such items:
- (ii) Verification of the integrity of the tamper-safing devices for such items;
- (iii) Reverification of identity and quantity of contained special nuclear material for each item not tampersafed, or whose tamper-safing is found to have been compromised;
- (iv) Verification of the correctness of the inventory records of identity and location for all such items; and
- (v) Documentation in compliance with the requirements of paragraphs (f)(2)(i), (ii), (iii), and (iv) of this section. Each record documenting compliance with these requirements must be retained for three years after it is made.
- (3) Establish inventory procedures for special nuclear material in process that provide for:
- (i) Measurement of all quantities not previously measured by the licensee for element and fissile isotope; and
- (ii) For all material whose content of element and fissile isotope has been previously measured by the licensee but for which the validity of such previously made measurements has not been assured by tamper-safing, ver-

- ification of the quantity of contained element and fissile isotope by remeasurement.
- (4) Conduct physical inventories according to written inventory instructions for each inventory which shall;
- (i) Assign inventory duties and responsibilities;
- (ii) Specify the extent to which each material balance area and process is to be shut down, cleaned out, and/or remain static; <sup>4</sup>
- (iii) Identify the basis for accepting previously made measurements and their limits of error;
- (iv) Designate measurements to be made for inventory purposes and the procedures for making such measurements; and
- (v) Identify the means by which material on inventory will be listed to assure that each item is inventoried and that there is no duplication.
- (g) Each licensee subject to the requirements of paragraph (e) of this section shall submit to the Atomic Energy Commission for approval by March 6, 1974, a full description of the program intended to be used to enable the licensee to comply with that paragraph and the requirements set forth in paragraph (f) of this section. This program shall be followed by the licensee after May 6, 1974.
- (h) Each licensee who determines that the requirements of paragraph (e) of this section will require modifications of his plant or equipment costing \$500,000 or more may, by March 6, 1974, apply to the Atomic Energy Commission for an extension of time, not to exceed six additional months, for compliance with those requirements. Each application for extension shall include a description of the modifications to be made, a statement of estimated associated costs with substantiating evidence, and a schedule of the dates when the modifications will be commenced and completed.
- (i)(1) Records which must be maintained pursuant to this part may be the original or a reproduced copy or

<sup>&</sup>lt;sup>4</sup>No process shutdown and/or cleanout for inventory is required if requirements with respect to MUF and the limit of error of MUF as specified in paragraph (e)(5)(ii) of this section are met using other inventory methods.

microform if such reproduced copy or microform is duly authenticated by authorized personnel and the microform is capable of producing a clear and legible copy after storage for the period specified by Commission regulations. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, specifications, must include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

(2) If there is a conflict between the Commission's regulations in this part, license condition, or other written Commission approval or authorization pertaining to the retention period for the same type of record, the retention period specified in the regulations in this part for such records shall apply unless the Commission, pursuant to §70.14, has granted a specific exemption from the record retention requirements specified in the regulations in this part.

[38 FR 30544, Nov. 6, 1973, as amended at 38 FR 32784, Nov. 28, 1973; 41 FR 18303, May 3, 1976; 43 FR 6925, Feb. 17, 1978; 50 FR 7579, Feb. 25, 1985; 52 FR 10038, Mar. 30, 1987; 53 FR 19253, May 27, 1988; 56 FR 55998, Oct. 31, 1991; 61 FR 24675, May 16, 1996]

# § 70.52 Reports of accidental criticality or loss or theft or attempted theft of special nuclear material.

- (a) Each licensee shall notify the NRC Operations Center<sup>1</sup> within one hour after discovery of any case of accidental criticality or any loss, other than normal operating loss, of special nuclear material.
- (b) Each licensee who possesses one gram or more of contained uranium-235, uranium-233, or plutonium shall notify the NRC Operations Center within one hour after discovery of any loss or theft or unlawful diversion of special nuclear material which the licensee is licensed to possess or any incident in which an attempt has been made or is believed to have been made

to commit a theft or unlawful diversion of such material.

- (c) This notification must be made to the NRC Operations Center via the Emergency Notification System if the licensee is party to that system. If the Emergency Notification System is inoperative or unavailable, the licensee shall make the required notification via commercial telephonic service or other dedicated telephonic system or any other method that will ensure that a report is received by the NRC Operations Center within one hour. The exemption of §73.21(g)(3) applies to all telephonic reports required by this section.
- (d) Reports required under §73.71 need not be duplicated under the requirements of this section.

[52 FR 21657, June 9, 1987, as amended at 59 FR 14087, Mar. 25, 1994]

### § 70.53 Material status reports.

- (a)(1) Each licensee who is authorized to possess at any one time and location special nuclear material in a quantity totaling more than 350 grams of contained uranium-235, uranium-233, or plutonium, or any combination thereof, shall complete and submit material balance reports as required by §74.13(a)(1) of this chapter.
- (2) Any licensee who is required to submit routine material status reports pursuant to §75.35 of this chapter shall follow the requirements set out in §74.13(a)(2) of this chapter.
- (b) Each licensee subject to the requirements of §70.51(e) shall follow the requirements set out in §§74.13(b) and 74.17(b) of this chapter.

[50 FR 7579, Feb. 25, 1985, as amended at 52 FR 19305, May 22, 1987]

# § 70.54 Nuclear material transfer reports.

- (a) Each licensee who transfers and each licensee who receives special nuclear material shall follow the requirements set out in §74.15(a) and (b) of this chapter.
- (b) Any licensee who is required to submit inventory change reports on DOE/NRC Form-741 pursuant to §75.34

<sup>&</sup>lt;sup>1</sup>Commercial telephone number of the NRC Operations Center is (301) 816–5100.

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of this chapter shall follow the requirements set out in  $\S74.15(c)$  of this chapter

[50 FR 7579, Mar. 28, 1985]

### § 70.55 Inspections.

(a) Each licensee shall afford to the Commission at all reasonable times opportunity to inspect special nuclear material and the premises and facilities wherein special nuclear material is used, produced, or stored.

(b) Each licensee shall make available to the Commission for inspection, upon reasonable notice, records kept by the licensee pertaining to his receipt, possession, use, acquisition, import, export, or transfer of special nu-

clear material.

- (c)(1) In the case of fuel cycle facilities where nuclear reactor fuel is fabricated or processed each licensee shall upon request by the Director, Office of Nuclear Material Safety and Safeguards or the appropriate NRC Regional Administrator, provide rent-free office space for the exclusive use of Commission inspection personnel. Heat, air conditioning, light, electrical outlets and janitorial services shall be furnished by each licensee. The office shall be convenient to and have full access to the facility and, shall provide the inspector both visual and acoustic privacy.
- (2) For a site with a single fuel facility licensed pursuant to part 70, the space provided shall be adequate to accommodate a full-time inspector, a part-time secretary and transient NRC personnel and will be generally commensurate with other office facilities at the site. A space of 250 square feet either within the site's office complex or in an office trailer or other on site space is suggested as a guide. For sites containing multiple fuel facilities, additional space may be requested to accommodate additional full-time inspector(s). The office space that is provided shall be subject to the approval of the Director, Office of Nuclear Material Safety and Safeguards or the appropriate NRC Regional Administrator. All furniture, supplies and communication equipment will be furnished by the Commission.
- (3) The licensee shall afford any NRC resident inspector assigned to that site

or other NRC inspectors identified by the Director, Office of Nuclear Material Safety and Safeguards, as likely to inspect the facility, immediate unfettered access, equivalent to access provided regular plant employees, following proper identification and compliance with applicable access control measures for security, radiological protection, and personal safety.

[21 FR 764, Feb. 3, 1956. Redesignated at 25 FR 1607, Feb. 25, 1960, and 25 FR 12730, Dec. 13, 1960, and amended at 32 FR 2563, Feb. 7, 1967; 44 FR 47919, Aug. 16, 1979; 52 FR 31612, Aug. 21, 1987; 54 FR 6877, Feb. 15, 1989; 55 FR 5979, Feb. 21, 1990]

### § 70.56 Tests.

Each licensee shall perform, or permit the Commission to perform, such tests as the Commission deems appropriate or necessary for the administration of the regulations in this part, including tests of (a) special nuclear material, (b) facilities wherein special nuclear material is utilized, produced or stored, (c) radiation detection and monitoring instruments, and (d) other equipment and devices used in connection with the production, utilization or storage of special nuclear material.

[21 FR 764, Feb. 3, 1956. Redesignated at 25 FR 1607, Feb. 25, 1960, and 25 FR 12730, Dec. 13, 1960]

# § 70.57 Measurement control program for special nuclear materials control and accounting.

- (a) As used in this section:
- (1) Measurement includes sampling and means the determination of mass, volume, quantity, composition or other property of a material where such determinations are used for special nuclear material control and accounting purposes.
- (2) Measurement system means all of the apparatus, equipment, instruments and procedures used in performing a measurement.
- (3) Reference standard means a material, device, or instrument whose assigned value is known relative to national standards or nationally accepted measurement systems.
- (4) Traceability means the ability to relate individual measurement results

to national standards or nationally accepted measurement systems through an unbroken chain of comparisons.

- (5) Random error refers to the variation encountered in all measurement work, characterized by the random occurrence of both positive and negative deviations from a mean value.
- (6) A systematic error is a constant unidirectional component of error that affects all members of a data set; its value can, in some instances, be estimated by the deviation of the mean of a measurement process from a reference value. A systematic error whose value has been determined in this manner is called a bias, whose effect can be corrected for.
- (7) Uncertainty is the extent to which a measurement result is in doubt because of the effects of random error variances and the limits of systematic errors associated with a measurement process, after the measurements result has been corrected for bias.
- (8) Calibration means the process of determining the numerical relationship between the observed output of a measurement system and the value, based upon reference standards, of the characteristics being measured.
- (b) In accordance with §70.58(f), each licensee who is authorized to possess at any one time and location strategic special nuclear material, or special nuclear material of moderate strategic significance, in a quantity exceeding one effective kilogram and to use such special nuclear material for activities other than those involved in the operation of a nuclear reactor licensed pursuant to part 50 of this chapter, those involved in a waste disposal operation, or as sealed sources, shall establish and maintain a measurement control program for special nuclear materials control and accounting measurements. Each program function must be identified and assigned in the licensee organization in accordance with §70.58(b)(2), and functional organizational relationships must be set forth in writing in accordance with §70.58(b)(3). The program must be described in a manual which contains the procedures, instructions, and forms prepared to meet the requirements of this paragraph, including procedures for the preparation, review, approval, and prompt dissemina-

tion of any program modifications or changes. The licensee shall retain the current program as a record until the Commission terminates the license authorizing possession of the nuclear materials. The licensee's program shall include the following:

(1) The licensee shall assign responsibility for planning, developing, coordinating, and administering the program to an individual in his organization who has no direct responsibilities for the operation of the analytical laboratory or for the processing of material, holds a position at an organizational level which will permit independence of action and objectivity of decision and has authority to obtain all the information required to monitor and evaluate measurement quality as required by this section.

(2) Provisions must be made for management reviews to determine the adequacy of the program and to assess the applicability of current procedures and for planned audits to verify conformance with all aspects of the program. These reviews and audits must be performed at intervals not to exceed 12 months. Audits and reviews must be performed by trained individuals independent of direct responsibility for the receipt, custody, utilization, measurement, measurement quality, and shipment of special nuclear material. The results of reviews and audits must be recorded and reported to licensee management. The licensee shall retain each record of a review or an audit for three years after the record is made.

(3) The licensee shall ensure that any person who contracts to perform materials control and accounting measurement services conforms with applicable requirements of paragraphs (b) through (8) and (10) through (12) of this section. Conformance must include reporting by the contractor of sufficient error data to allow the licensee to calculate bias corrections and measurement limits of error. All statistical studies must be reported or references in the measurement report submitted to the licensee, who shall have access to the contractor's supporting control data. The licensee shall perform reviews to determine the adequacy of the contractor's program and audits to verify conformance with all aspects of the § 70.57

program. Reviews and audits must be performed at intervals not to exceed 12 months. The results of reviews and audits must be documented and reported to licensee management. The licensee shall retain the record of the results of the licensee review and audit of the contractor's program for three years after the record is made.

- (4) In order to ensure that potential sources of sampling error are identified and that samples are representative, process and engineering tests must be performed using well characterized materials to establish or to verify the applicability of existing procedures for sampling special nuclear materials and for maintaining sample integrity during transport and storage. The licensee shall record the results of the above process and engineering tests and shall maintain those results as a record for as long as that sampling systems is in use and for three years following the last such use. The program must ensure that such procedures are maintained and followed, and that sampling is included in the procedures for estimating biases, limits for systematic errors, and random error variances.
- (5) The program shall include provisions for the review and approval, before use, of written procedures for:
- (i) Preparing or acquiring, maintaining, storing and using reference standards,
- (ii) Calibrating measurement systems, performing bulk measurements, obtaining samples, and performing compositional analyses,
- (iii) Recording, analyzing and reporting the program data and information, and
- (iv) Controlling measurement performance.
- (6) To ensure the adequacy of each measurement system with respect to process flows, sampling and measurement points, and nominal material compositions, engineering analyses and evaluations must be made of the design, installation, preoperational tests, calibration, and the operation of each system. These analyses and evaluations must be repeated whenever a significant change is made in any component of a system. The licensee shall record the results of these analyses and evaluations and retain these records

for three years after the life of the process or equipment.

- (7) Procedures and performance criteria must be established for the training, qualifying, and periodic requalifying of all personnel who perform sampling and measurements for materials control and accounting purposes. The licensee shall retain as a record the results of personnel qualification or requalification for three years after the record is made.
- (8) The program must generate current data on the performance of measuring processes, including, as appropriate, values for bias corrections and their uncertainties, random error variances, limits for systematic errors, and other parameters needed to establish the uncertainty of measurements pertaining to materials control and accounting. The program data must reflect the current process and measurement condition existing at the time the control measurements are made. The licensee shall record this data and retain this record for three years after the record is made. Measurements which are not controlled by the program may not be used for materials control or for accounting purposes. The program must include:
- (i) The ongoing use of standards for calibration and control of all applicable measurement systems. Calibrations shall be repeated whenever any significant change occurs in a measurement system or when program data, generated by tests performed at a predetermined frequency, indicate a need for recalibration. Calibrations and tests shall be based upon reference standards.
- (ii) A system of control measurements to provide current data for the determination of random error behavior. On a predetermined schedule, the system shall include the replicate analysis of process samples, the replicate weight or volume measurement of bulk quantities of material, and the analysis of replicate process samples.
- (9) The program data generated during the current material balance period shall be used for the determination of the limit of error of the plant material balance. Measurement error data collected and used during immediately preceding material balance periods

may be combined with current data provided that the measurements are in statistical control, i.e., when repeated samples from the portion of the measurement system under test behave as random samples from a stable probability distribution. Under such conditions, data sets may be combined provided that the parameter estimates based on the current set of data and the previous set of data are not significantly different on the basis of appropriate statistical tests performed at a level of significance of 0.05.

(10) The licensee shall evaluate with appropriate statistical methods all program data and information, and relevant process data used to establish bias corrections and their associated uncertainties, random error variances, limits for systematic error, and other parameters pertaining to special nuclear materials control and accounting measurements, and to control measurement performance pursuant to §70.58(f). Bias corrections shall be made by an appropriate statistical procedure.

(11)(i) The licensee shall establish and maintain a statistical control system, including control charts and formal statistical procedures, designed to monitor the quality of each type of program measurement. The licensee shall retain a copy of the current statistical control system as a record until the Commission terminates each license that authorizes possession of the material that the system affects and shall retain copies of such system documents for previous inventory periods as a record for three years after they are replaced.

(ii) Control chart limits must be established to be equivalent to levels of significance of 0.05 and 0.001. Whenever control data exceed the 0.05 control limits, the licensee shall investigate the condition and take corrective action in a timely manner. The licensee shall record the results of these investigations and actions and retain each record for three years after the record is made. Whenever the control data exceed the 0.001 control limits, the measurement system that generated the data must not be used for material control and accounting purposes until the deficiency has been corrected and the

system has been brought into control at the 0.05 control level.

(12) The licensee shall provide a records system in which all data, information, reports, and documents generated by the measurement control program must be retained for three years. Records must include a summary of the error data utilized in the limit of error calculations performed for each material balance period. The records system must be organized for efficient retrieval of program information. Each reported result must be readily relatable to the original measurement data and to all relevant measurement control information, including pertinent calibration data. Records must be available for NRC inspection.

(c) Applicants and licensees subject to the provisions of paragraph (b) of this section shall submit to the Commission for approval a detailed plan describing the program that will be used to comply with said provisions. The plan submitted shall include the identification of those measurements to be contracted and shall describe the steps the licensee shall take to assure the adequacy of such procedures. Licensee's plans shall be submitted on or before November 11, 1975.

(d) Licensees subject to the provisions of paragraph (b) of this section shall follow the plans submitted pursuant to paragraph (c) of this section after May 11, 1976, or thirty days after the submitted plan is approved by the NRC whichever is later. After May 11, 1976, an applicant subject to the provisions of paragraph (b) of this section shall immediately implement his plan, submitted pursuant to paragraph (c) of this section, following incorporation of said plan as a condition of license.

[40 FR 33652, Aug. 11, 1975, as amended at 40 FR 50704, Oct. 31, 1975; 42 FR 25721, May 19, 1977; 53 FR 19254, May 27, 1988]

# § 70.58 Fundamental nuclear material controls.

(a) Each licensee who is authorized to possess at any one time and location strategic special nuclear material in irradiated fuel reprocessing operations or special nuclear material of moderate strategic significance in a quantity exceeding one effective kilogram, and to

use such special nuclear material except for sealed sources and those uses involved in the operation of a nuclear reactor licensed pursuant to part 50 of this chapter and those involved in a waste disposal operation, shall establish, maintain, and follow written material control and accounting procedures in compliance with the fundamental nuclear material control requirements specified in paragraphs (b) through (k) of this section and such other controls as the Commission determines to be essential for the control of and accounting for special nuclear material

- (b)(1) The overall planning, coordination, and administration of the material control and accounting functions for special nuclear materials shall be vested in a single individual at an organizational level sufficient to assure independence of action and objectiveness of decisions. In manufacturing organizations, such individual shall be independent of individuals or units that are solely responsible for production functions.
- (2) Material control and accounting functions shall be identified and assigned in the licensee organization to provide a separation of functions so that the activities of one individual or organizational unit serve as controls over and checks of the activities of other individuals or organizational units.
- (3) Material control and accounting functional and organizational relationships must be set forth in writing in job descriptions, organizational directives, instructions, procedure manuals, etc. This documentation must include qualification requirements position and definitions of authorities, responsibilities, and duties. Delegations of material control and accounting responsibilities and authority must be in writing. The licensee shall retain this documentation as a record until the Commission terminates each license that authorizes the activity that is subject to retention of the documentation, and if any portion of the documentation is superseded, retain the superseded material for three years after each change.
- (c) A management system shall be established, maintained, and followed to

provide for the development, revision, implementation, and enforcement of nuclear material control and accounting procedures. The system shall include:

- (1) Provisions for written approval of such procedures and any revisions thereto by the individual with overall responsibility for the material control and accounting function and by licensee plant management.
- (2) Provision for a review at least every 12 months of the nuclear material control system by individuals independent of both nuclear material control management and personnel who have direct responsibility for the receipt, custody, utilization, measurement, measurement quality, and shipment of nuclear material. Such a review shall include a review and audit of material control and accounting procedures and practices and an audit of the nuclear material records. The results of the review and audit along with recommendations for improvements shall be documented, reported to the licensee's corporate and plant management, and kept available at the plant for inspection for a period of five years.
- (d) Material Balance Areas (MBA) or Item Control Areas (ICA) shall be established for physical and administrative control of nuclear material.
- (1) Each MBA shall be an identifiable physical area such that the quantity of nuclear material being moved into or out of the MBA is represented by a measured value determined pursuant to paragraph (e) of this section.
- (2) The number of MBAs shall be sufficient to localize nuclear material losses, or thefts and identify the mechanisms.
- (3) The custody of all nuclear material within any MBA or ICA shall be the responsibility of a single designated individual.
- (4) ICAs shall be established according to the same criteria as MBAs except that control into and out of such areas shall be by item identity and count for previously determined special nuclear material quantities, the validity of which shall be assured by tamper-safing unless the items are sealed sources.

- (e) A system must be established, maintained, and followed for the measurement of all special nuclear material received, produced, or transferred between MBAs, transferred from MBAs to ICAs, on inventory, or shipped, discarded, or otherwise removed from inventory and for the determination of the limit of error associated with each such measured quantity except for plutonium-beryllium sources; samples that have been determined by other means to contain less than 10 grams U-235, U-233, or plutonium each; and reactor-irradiated fuels involved in research, development, and evaluation programs in facilities other than irradiated-fuel reprocessing plants. The system must be described in writing and provide for sufficient measurements to substantiate the quantities of element and isotope measured and the associated limits or error. The licensee shall record the required measurements and associated limits of error and shall retain any record associated with this system for three years after the record is made.
- (f) A program must be established, maintained, and followed pursuant to  $\S70.57(b)$  for the continuing determination and control of the systematic and random errors of measurement processes at a level commensurate with the requirements of  $\S70.51(e)(5)$ . The licensee shall retain each completed record required by the program for three years after the record is made.
- (g) Procedures shall be established, maintained, and followed to:
- (1) Assure accurate identification and measurement of the quantities of special nuclear material received and shipped by a licensee;
- (2) Review and evaluate shipper-receiver differences on an individual container or lot basis, as appropriate, on a shipment basis, and on a cumulative basis for shipments of like type material:
- (3) Take appropriate investigative and corrective action to reconcile shipper-receiver differences that are statistically significant at the 95 percent confidence level except those shipments which involve differences of 50 grams or less of U-235, U-233, or plutonium; and

- (4) Maintain records of shipper-receiver difference evaluation, investigations, and corrective actions on file at the plant for a period of five years.
- (h) A system of storage and internal handling controls must be established, maintained, and followed to provide current knowledge of the identity, quantity, and location of all special nuclear material contained within a plant in discrete items and containers. The licensee shall include procedures as specified in §70.51(e)(1) and retain any record associated with the procedures for six months after the record is made;
- (i) Procedures for special nuclear material scrap control must be established, maintained, and followed to limit the accumulation and the uncertainty of measurement of these materials on inventory. The licensee shall retain a copy of the current procedures as a record until the Commission terminates each license that authorizes the activity that is subject to the retention of procedures and, if any portion of the procedures is superseded, retain the superseded portion for three years after each change. Such procedures must include:
- (1) Identification and classification of special nuclear material scrap;
- (2) Regular processing and recovery of scrap so that no item of such scrap generated in the licensee's plant measured with an uncertainty of greater than ±10 percent remains on inventory longer than six months when such scrap contains plutonium, U-233, or uranium enriched 20 percent or more in the isotope U-235 or twelve months when such scrap contains uranium enriched less than 20 percent in the isotope U-235 or plutonium containing 80 percent or more by weight of the isotope Pu-238.
- (j) Physical inventory procedures must be established, maintained, and followed so that special nuclear material balance and their measurement uncertainties can be determined on the basis of measurements in compliance with the material balance and inventory requirements and criteria specified in §70.51. The licensee shall retain a copy of the current procedures as a record until the Commission terminates each license that authorizes the

activity that is subject to the retention of procedures and, if any portion of the procedures is superseded, retain the superseded portion for three years after each change.

- (k) A system of records and reports must be established, maintained, and followed that will provide information sufficient to locate special nuclear material and to close a measured material balance around each material balance area and the total plant, as specified in §70.51. As required by §70.51, the licensee shall retain the records associated with this system for three years after the records are made. This system must include:
- (1) A centralized accounting system employing double-entry bookkeeping;
- (2) Subsidiary accounts for each material balance area and item control area:
- (3) Records pertinent to the requirements of §70.51(e)(1);
- (4) Procedures for the reconciliation of subsidiary accounts to control accounts at the end of each accounting period; and
- (5) Procedures for reconciliation of control and subsidiary accounts to the results of physical inventories.
- (l) Each licensee subject to the requirements of this section shall submit by January 24, 1975, a full description of his program for control of and accounting for special nuclear material in his possession under license to show how compliance with the requirements of this section, except for paragraph (f), will be accomplished. This program shall be followed by the licensee after July 24, 1975, or sixty days after the program is approved by the NRC, whichever is the later.

[39 FR 37766, Oct. 24, 1974, as amended at 40 FR 33653, Aug. 11, 1975; 49 FR 19628, May 9, 1984; 50 FR 7579, Feb. 25, 1985; 52 FR 10038, Mar. 30, 1987; 53 FR 19255, May 27, 1988]

# § 70.59 Effluent monitoring reporting requirements.

- (a) Each licensee authorized to possess and use special nuclear material for processing and fuel fabrication, scrap recovery, conversion of uranium hexafluoride, or in a uranium enrichment facility shall:
- (1) Submit a report to the appropriate NRC Regional Office shown in

appendix D of part 20 of this chapter, with copies to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, within 60 days after January 1, 1976, and July 1, 1976, and within 60 days after January 1 and July 1 of each year thereafter, specifying the quantity of each of the principal radionuclides released to unrestricted areas in liquid and gaseous effluents during the previous six months of operation, and such other information as the Commission may require to estimate maximum potential annual radiation doses to the public resulting from effluent releases. If quantities of radioactive materials released during the reporting periods are significantly above the licensee's design objectives previously reviewed as part of the licensing action, the report shall cover this specifically. On the basis of such reports and any additional information the Commission may obtain from the licensee or others, the Commission may from time to time require the licensee to take such action as the Commission deems appropriate.

[40 FR 53230, Nov. 17, 1975, as amended at 41 FR 21627, May 27, 1976; 42 FR 25721, May 19, 1977; 52 FR 31612, Aug. 21, 1987; 57 FR 18393, Apr. 30, 1992]

# MODIFICATION AND REVOCATION OF LICENSES

# § 70.61 Modification and revocation of licenses.

- (a) The terms and conditions of all licenses shall be subject to amendment, revision, or modification by reason of amendments to the Atomic Energy Act of 1954, or by reason of rules, regulations or orders issued in accordance with the Act or any amendments thereto:
- (b) Any license may be revoked, suspended or modified for any material false statements in the application or any statement of fact required under section 182 of the Act or because of conditions revealed by such application or statement of fact or any report, record, or inspection or other means which would warrant the Commission

to refuse to grant a license on an original application, or for failure to construct or operate a facility in accordance with the terms of the construction permit or license, the technical specifications in the application, or for violation of, or failure to observe any of the terms and conditions of the Act, or of any regulation of the Commission.

- (c) Upon revocation, suspension or modification of a license, the Commission may immediately retake possession of all special nuclear material held by the licensee. In cases found by the Commission to be of extreme importance to the national defense or security, or to the health and safety of the public, the Commission may recapture any special nuclear material held by the licensee prior to any of the procedures provided under section 551-558 of title 5 of the United States Code.
- (d) Except in cases of willfulness or those in which the public health, interest or safety requires otherwise, no license shall be modified, suspended or revoked unless, prior to the institution of proceedings therefor, facts or conduct which may warrant such action shall have been called to the attention of the licensee in writing and the licensee shall have been accorded opportunity to demonstrate or achieve compliance with all lawful requirements.

[21 FR 764, Feb. 3, 1956, as amended at 35 FR 11461, July 17, 1970]

# § 70.62 Suspension and operation in war or national emergency.

Whenever Congress declares that a state of war or national emergency exists, the Commission, if it finds it necessary to the common defense and security may,

- (a) Suspend any license it has issued.
- (b) Order the recapture of special nuclear material.
- (c) Order the operation of any licensed facility.
- (d) Order entry into any plant or facility in order to recapture special nuclear material or to operate the facility. Just compensation shall be paid for any damages caused by recapture of special nuclear material or by oper-

ation of any facility, pursuant to this section.

[21 FR 764, Feb. 3, 1956, as amended at 32 FR 4056, Mar. 15, 1967; 35 FR 11461, July 17, 1970]

### ENFORCEMENT

### § 70.71 Violations.

- (a) The Commission may obtain an injunction or other court order to prevent a violation of the provisions of—
- (1) The Atomic Energy Act of 1954, as amended;
- (2) Title II of the Energy Reorganization Act of 1974, as amended; or
- (3) A regulation or order issued pursuant to those Acts.
- (b) The Commission may obtain a court order for the payment of a civil penalty imposed under section 234 of the Atomic Energy Act:
  - (1) For violations of—
- (i) Sections 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 of the Atomic Energy Act of 1954, as amended;
- (ii) Section 206 of the Energy Reorganization Act;
- (iii) Any rule, regulation, or order issued pursuant to the sections specified in paragraph (b)(1)(i) of this section;
- (iv) Any term, condition, or limitation of any license issued under the sections specified in paragraph (b)(1)(i) of this section.
- (2) For any violation for which a license may be revoked under section 186 of the Atomic Energy Act of 1954, as amended.

[57 FR 55077, Nov. 24, 1992]

# § 70.72 Criminal penalties.

- (a) Section 223 of the Atomic Energy Act of 1954, as amended, provides for criminal sanctions for willful violation of, attempted violation of, or conspiracy to violate, any regulation issued under sections 161b, 161i, or 161o of the Act. For purposes of section 223, all the regulations in part 70 are issued under one or more of sections 161b, 161i, or 161o, except for the sections listed in paragraph (b) of this section.
- (b) The regulations in part 70 that are not issued under sections 161b, 161i, or 161o for the purposes of section 223 are as follows: §§ 70.1, 70.2, 70.4, 70.5, 70.6, 70.8, 70.11, 70.12, 70.13, 70.13a, 70.14,

70.18, 70.23, 70.31, 70.33, 70.34, 70.35, 70.37, 70.61, 70.62, 70.63, 70.71, and 70.72.

[57 FR 55077, Nov. 24, 1992]

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